LIGHT TANK TACTICS

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SECTION 1

GENERAL

1. **Definition.**—A tank is a motor-propelled, heavily armored, track-laying vehicle, armed with machine guns utilizing flexible mounts, or machine guns and light and medium cannon. One flexible mount is provided for antiaircraft protection. Armored vehicles which operate on wheels or on wheels and tracks (half-track vehicles) and track-laying gun mounts (self-propelled guns) are not classified as tanks.

2. **Development.**—It must be understood that tanks are now constructed and utilized for a particular type of combat. Small, fast, lightly armored tanks used for scouting would be of little value in attacking heavily fortified positions. Heavily armed and armored tanks which have little difficulty in moving through well-organized ground resistance might become hopelessly stalled in marshy ground.

General tank development tends toward three types. First, a light, fast tank suitable for action against machine guns, hasty field fortifications, and troops. Second, a medium or general purpose tank suitable for action against infantry, and tank guns, and enemy light tanks in addition to performing light tank missions. Third, a heavy tank suitable for use against antitank guns, enemy light and medium tanks, and heavier fortifications and materiel. Heavy tanks are not designed for use on light tank missions.

3. **Classification.**—Generally, tanks are classified according to weight but due to current events the classifications are continually changing; therefore tanks herein are classified in accordance with type development outlined in the preceding paragraph. Light tanks are those armored with approximately one inch of plate. In more recent types the armament includes light cannon. Medium tanks are those armored with over an inch of plate and armed with machine guns and the 75mm gun. Heavy tanks are armored with over two inches of plate and mount 75mm or 105mm guns plus machine guns. Turrets and forward portions have heavier armor than other parts of the tank.

4. **Characteristics.**—a. Favorable characteristics are as follows:

(1) Heavy fire power.
(2) Great psychological and shock action.
(3) Speed, mobility, and maneuverability.
(4) Armored protection for the crews.

b. Unfavorable characteristics which accrue to the advantage of the defender are:

(1) Sensitiveness to the terrain.
(2) Noise during movement.

(3) Difficulty of group control during movement.

(4) Limited vision of both drivers and gunners.

(5) Fire from moving vehicles at longer ranges is limited in its casualty effect. (This disadvantage is minimized in tanks equipped with the gyro stabilizer, a feature of newer models.)

(6) Operating limitations imposed by crew fatigue.

(7) Vulnerability due to ineffectiveness and lack of armor on some parts of the tank. (Front plate of chasis and the turret are generally heavier, but tracks cannot be protected.)

(8) Susceptability to observation and destruction by enemy aircraft during movement and in bivouac.

5. General Principles of Employment.—a. Mass.—All modern armies employ tanks in mass (large numbers). A usual density of attack may be considered as one tank per 10 to 15 yards of attack frontage. It is usual to have this mass distributed in successive waves in such a manner that each succeeding wave strikes before the defender can recover from the preceding one. The interval between the tanks of each wave is about fifty yards. Strength is not frittered away on small, unimportant targets. All fire power and shock action is concentrated on key objectives held by the enemy. When these are taken others will then fall.

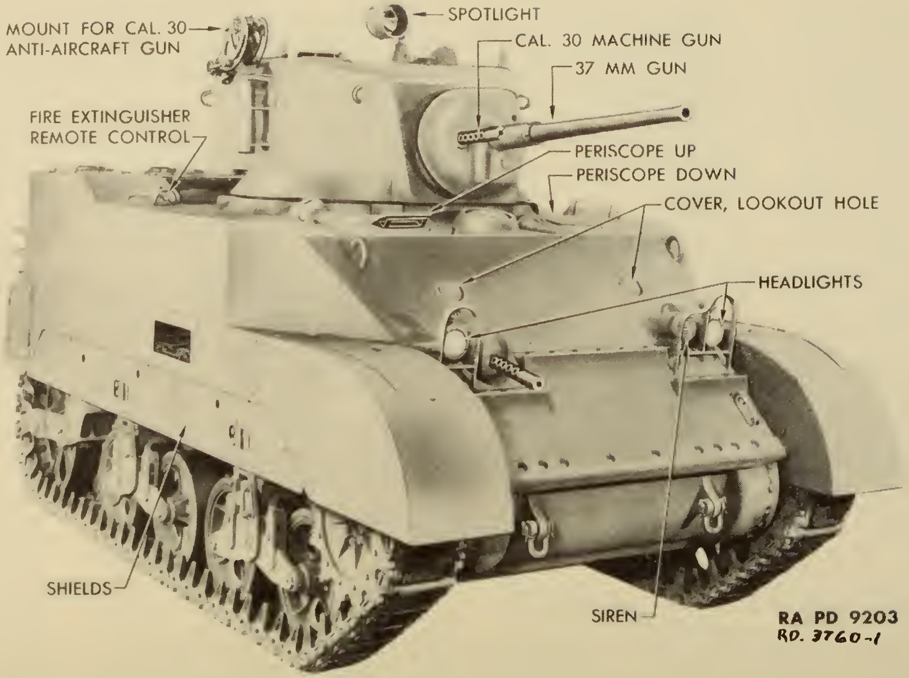
b. **Surprise.**—Surprise is essential. It must be assured by constant and careful camouflage, by speed of movement, and by powerful attacks. Surprise is attained by striking the enemy at an unexpected time, from an unexpected direction, and in sufficient force to gain the objective. Concealed movement prior to the attack, speed and the use of covered approaches assist in gaining surprise. Seek to surprise your enemy, but do not let yourself be surprised. Give your enemy credit for possessing as much or more tactical knowledge as you have. Never underestimate him. Expect the unexpected and be prepared for it. Ruses are sometimes effective, such as firing an artillery preparation on a sector of the enemy defense to draw his antitank defense to that sector, then attacking another part of his position.

c. **Maneuver.**—Maneuverability of tanks allows the concentration of mass, affords protection while tanks are in motion, allows utilization of cover during attack and permits a quick withdrawal out of effective artillery range after the attack. Maneuverability permits the use of tanks to deliver a decisive attack against critical points utilizing speed, direction, and shock action not obtainable with foot troops.

6. Tanks For Marine Corps Use.—a. Basis of Choice.— In selecting the type of tank best fitted for use by the Marine Corps, two very important points have been considered, i.e., weight and size. Since the greatest use of tanks anticipated by the Marine Corps will be their employment in landing operations, the most suitable type is of such size and weight that it can readily be handled by the ship's loading and unloading facilities and transported to the beach by landing craft. Figure 1 shows the Army Light tank now authorized for Marine Corps use.

b. **Scope of Text.**—No attempt is made to cover the tactics of large-scale tank operations combining the use of heavy, medium, and light tanks. Therefore, the remainder of this text deals with tanks in Marine Corps operations. Furthermore, the majority of this text deals with tanks after they have reached land. For the use of tanks in landing operations, see Section 3, paragraph 29. For details concerning the operation of the individual tank units see Armored Force Field Manuals as follows:

FM 17-10, Tactics and Technique.
FM 17-30, Tank Platoon.
FM 17-32, The Tank Company, Light and Medium.
FM 17-33, The Armored Battalion, Light and Medium.



RA PD 9203
RD. 3760-1

Figure 1.—U. S. Army Tank, M5A1, used by the Marine Corps.

SECTION 2

TANK TACTICS

7. **Mission.**—a. (1) The mission of the tank is to assist the progress of the infantry by overcoming or neutralizing hostile resistance and by breaking down obstacles that check the infantry advance.

(2) Tanks properly employed enable the foot troops to make a more rapid advance and reduce the duration of halts on objectives.

b. **Role of Marine Corps Tanks.**—The role of Marine Corps tanks is offensive action closely supported by infantry. Their employment on separate missions or in independent masses is not contemplated. In the attack the leading tanks precede the infantry to the objective, neutralize resistance and clear away obstacles which impede the infantry advance. Assault troops will leave the line of departure as soon as the last wave of tanks has crossed this line or will accompany the rear echelons or waves of tanks in the assault.

8. **Organization.**—a. **General.**—The Marine Division includes in its special troops one light tank battalion consisting of a headquarters and service company, a scout company, and three companies of eighteen tanks each. Of these eighteen tanks, five belong to each of the three platoons while the remaining three belong to company headquarters and are designated as one command, one executive, and one spare. These three tanks are, however replacements, two of them being normally equipped for both sending and receiving radio messages which are used as command and staff tanks. Each platoon leader's tank is likewise equipped for sending and receiving radio messages.

b. **Specific Organization.**—For specific organization of components of the light tank battalion, see tables of organization.

9. **Installations.**—a. **Tank Park.**—The tank park is the base of operations for the tanks in the field and is usually the point of assembly of the tanks before they move forward to the assembly area. It should be located beyond the range of hostile medium artillery, and should provide concealment, major maintenance facilities, and facilities for the movement of supplies.

b. **Assembly Area** (intermediate position).—(1) Prior to attack, tank units occupy an assembly area or intermediate position where tanks are repaired and everything made ready for battle. This position is chosen by the battalion or higher unit commander and should possess the following characteristics:

(a) Out of range of massed enemy artillery.

(b) Concealed from enemy air reconnaissance.

(c) Suitable routes for entrance and exit.

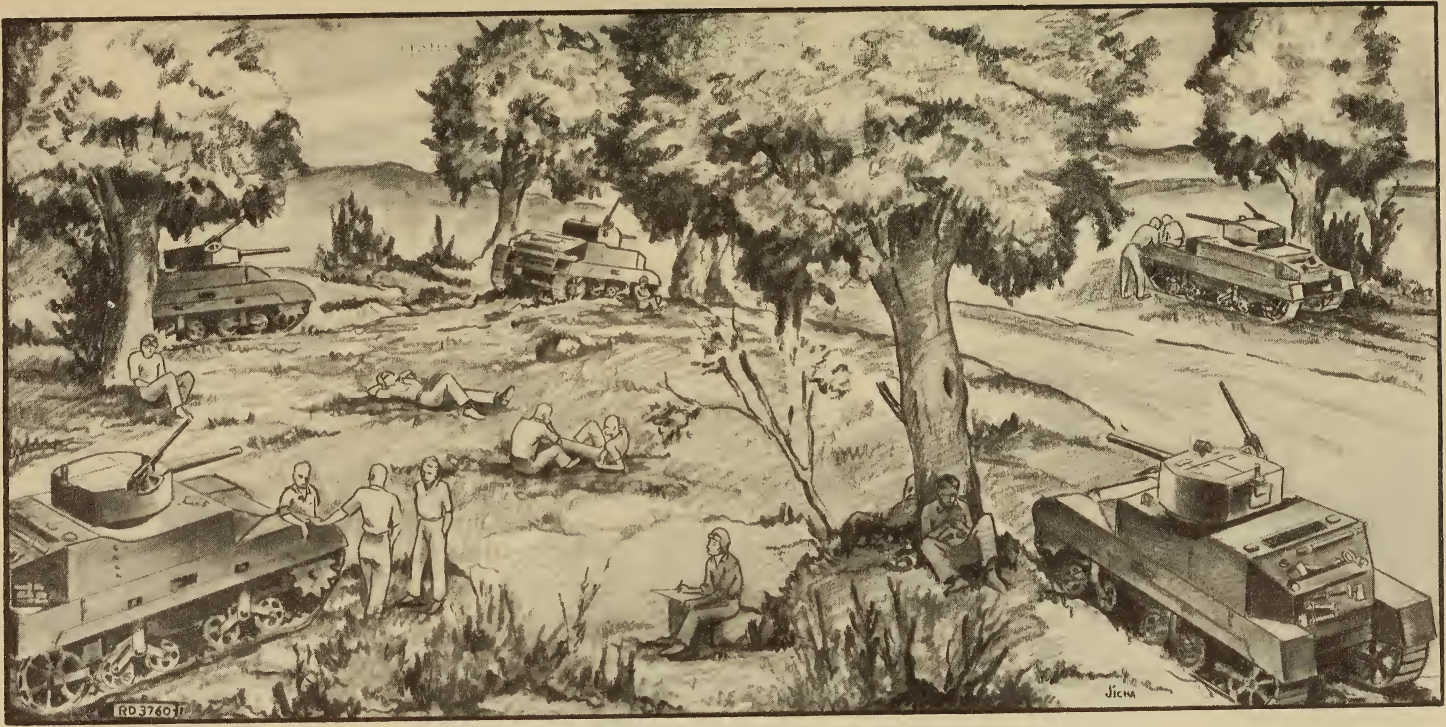
(d) Firm terrain for standing, and exit of tanks in attack formation to front or flanks.

(e) Sufficient size for disposition of units in depth so that they can move to front or flanks in attack formation.

(f) Utilization of terrain obstacles for security.

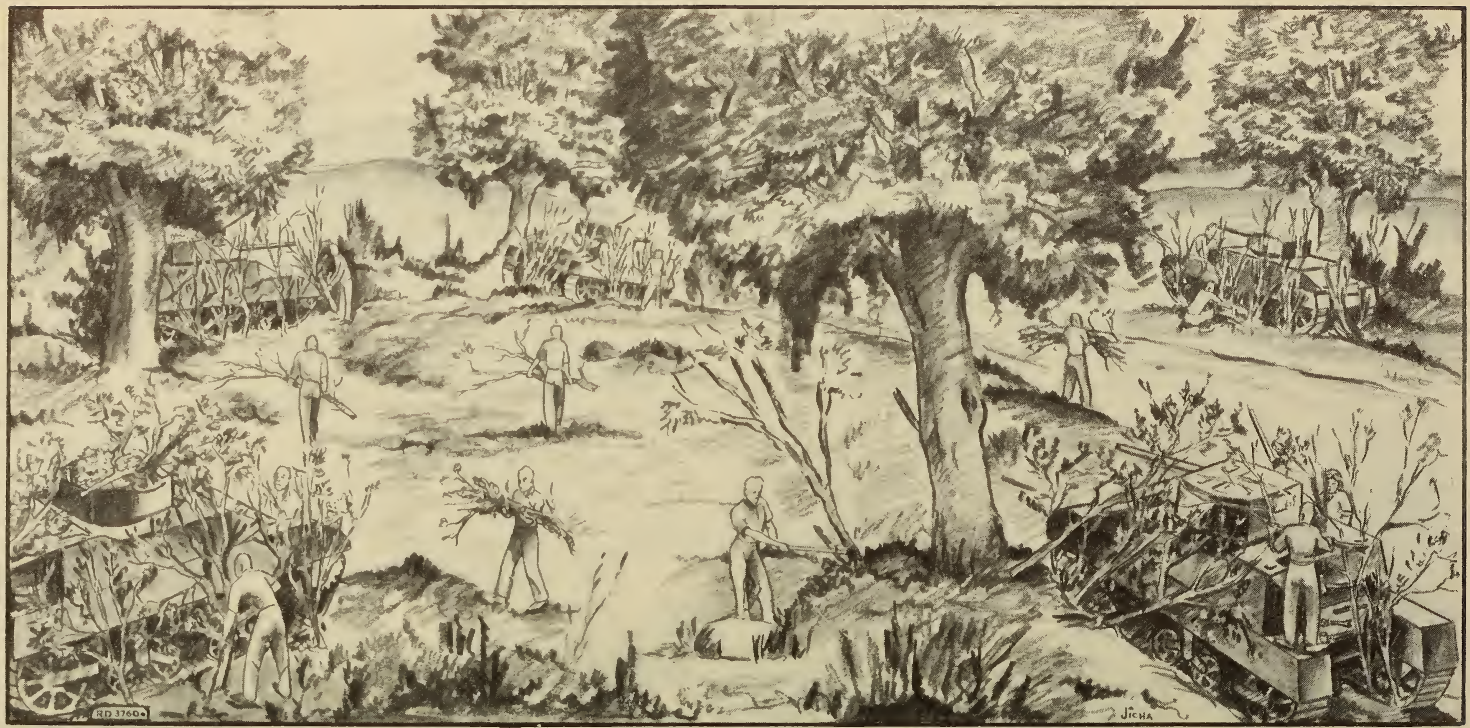
(g) Adequate water supply (when water-cooled engines are used).

(2) In the assembly area are located the agencies for supply and maintenance of the battalion. Here the food, ammunition, fuel, and water are replenished. Certain repairs and servicing must be done at the end of a day's engagement. Occasion may arise when the tanks must be held in continuous action with time out only for replenishment of ammunition, fuel, and oil. Before the commander decides on such a tank mission, he must consider the consequent loss in operative power which will be inflicted upon the tank unit. Although the tank is essentially fitted for offensive combat, it remains an effective vehicle only so long as it is regularly serviced. Figures 2 and 3 depict respectively the incorrect and correct action of tank units at the assembly area.



Do not move into assembly area and let crews remain idle.

Figure 2.—Incorrect procedure for tank units at assembly area.

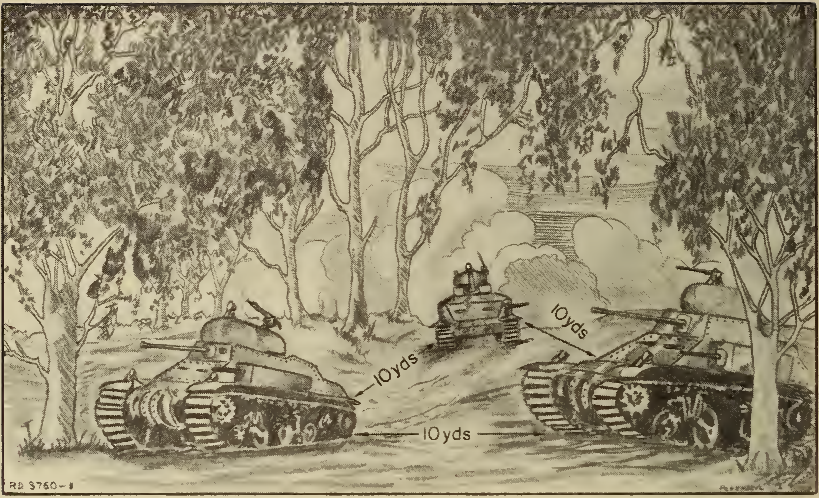


In assembly area crews conceal tanks and make checks preparatory for action.

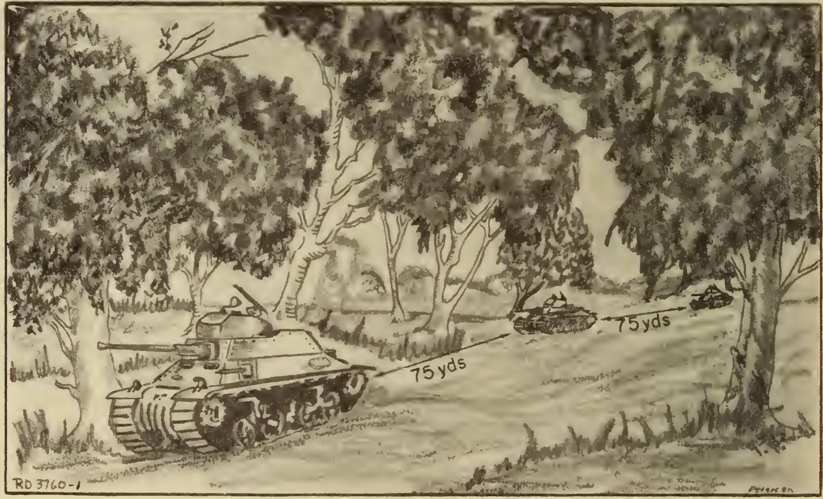
Figure 3.—Correct procedure for tank units at assembly area.

(3) It is well to remember that a bivouac or assembly area should be located well away from reserve areas occupied by foot troops and their protective installations due to difficulty of movement through these troops especially in the event of an emergency. Tank units normally a part of an organization reserve are usually kept under control of the organization commander rather than under the reserve commander.

c. **Attack Position.**—The attack position is one at which the tank unit waits to cross the line of departure and attack. It should have concealment, defilade, and if possible, should be directly in rear of the point where the unit is to cross the line of departure. Sometimes this position is close to and directly in rear of the point at which the line of departure is to be crossed; often, because of hostile activity, the necessity of surprise and maneuver, and lack of concealment, the position may be 3,000 or 4,000 yards in rear of the line of departure. But, when it is a great distance from the line of departure, care must be taken to see that the units leave in ample time to cross the line of departure on schedule. Tanks should remain in the attack position only a minimum length of time and while there, should be so disposed that a single shell or aerial bomb will not damage more than one tank. If practicable no two tanks should be closer than 75 yards. Their formation should be one which is favorable for rapid employment in case of sudden attack. The line of departure for tanks moving to the attack between or through assault elements is normally the same as for the assaulting foot troops. Figure 4 shows the correct and incorrect way to dispose tanks in an attack position.



(1) Do not assemble the tanks at interval of less than 75 yards. In such crowded formation, heavy losses are to be expected from artillery fire and bombing attacks.



(2) Extend distance between tanks to at least 75 yards in order to reduce casualties.

Figure 4.—Correct and incorrect disposition of tanks at attack position.

d. **Rallying Point.**—(1) The rallying point is a location to which tanks procede after capturing an objective for the following reasons:

(a) To assemble for reorganization.

(b) To prevent concentration in an exposed area which might subject the tank unit to effective hostile artillery fire.

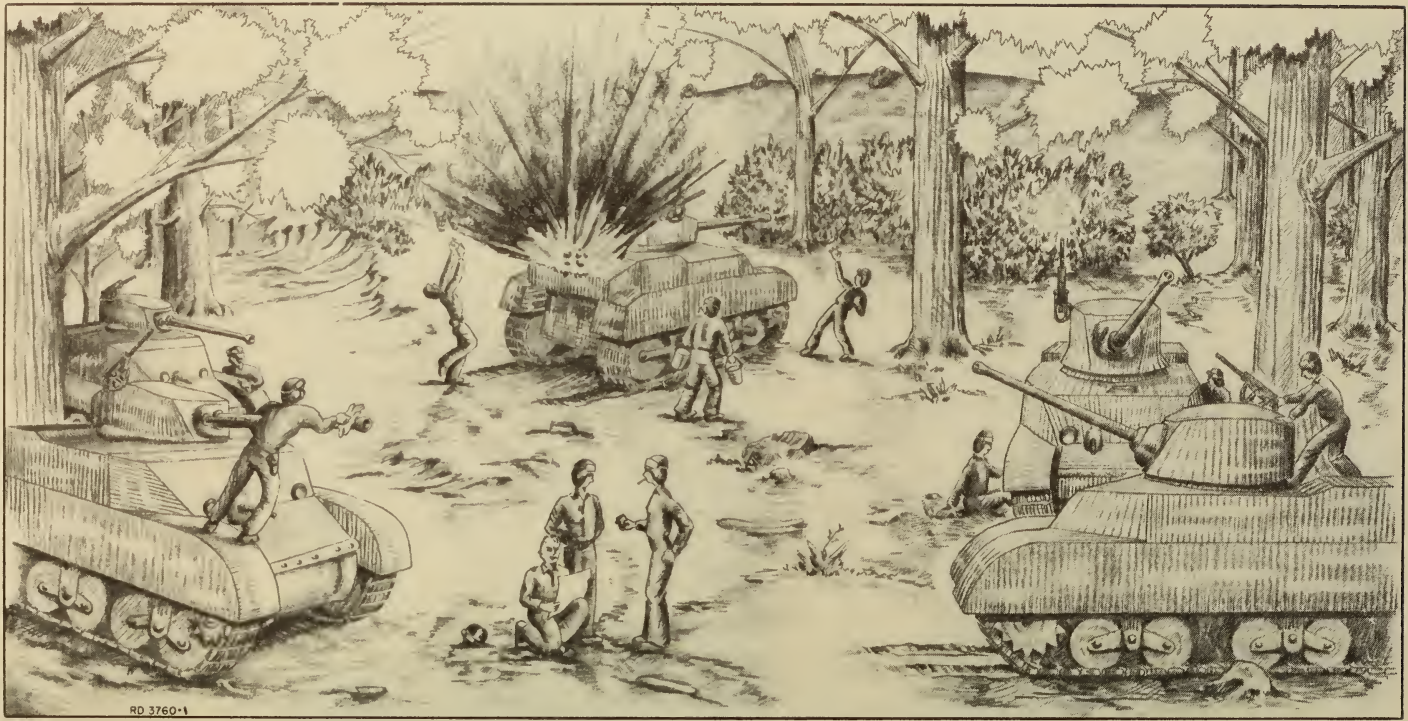
(c) To regain control.

(d) To receive further orders.

(2) Normally the first position in rear of the objective offering defilade and concealment within the zone of action of the supported unit is selected as the rallying point.

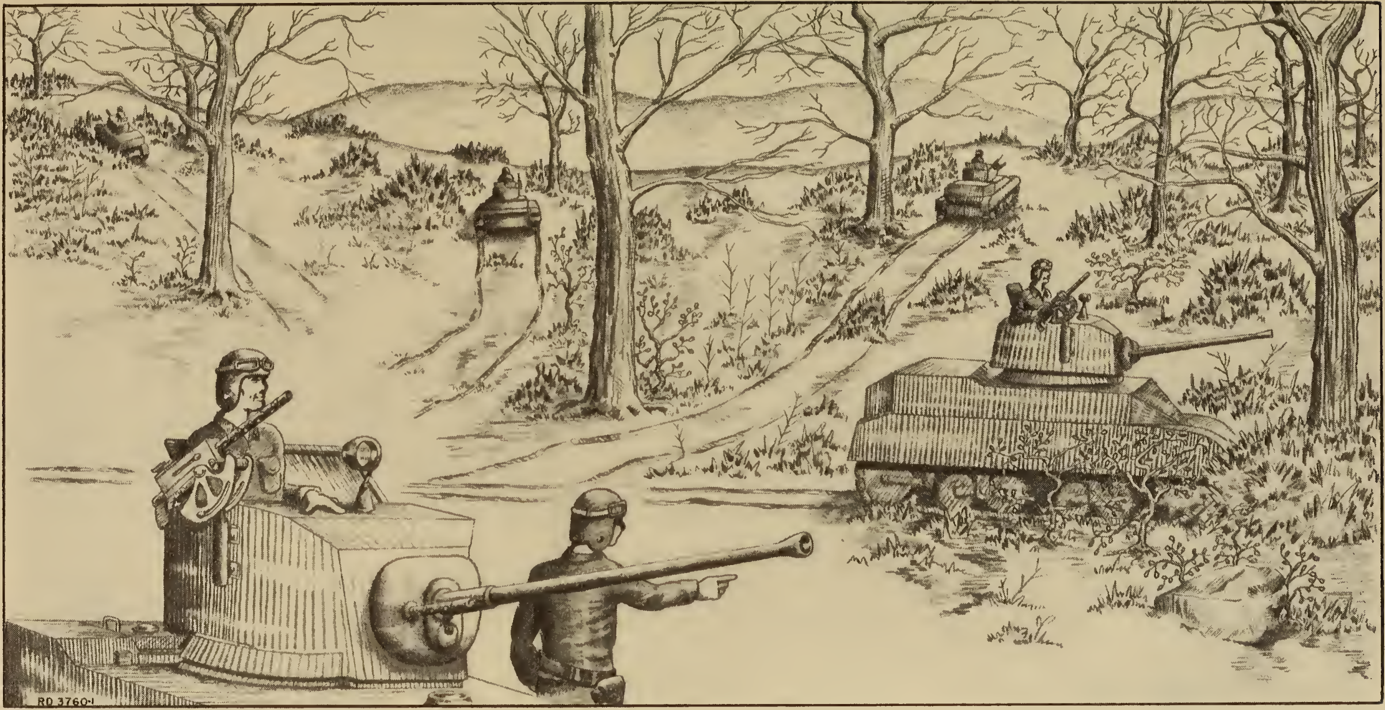
(3) The first consideration in selection of a rallying point is security. The most opportune time for the enemy to attack is while the unit is reorganizing. Therefore, the first unit to arrive immediately posts vehicles to cover likely avenues of approach and observers to warn of any approach. Reorganization is commenced after the security measures have been taken. Figures 5 and 6 show incorrect and correct manner of providing dispersion and security. Upon completion of reorganization at the rallying point, tank units either renew the attack, move to a position in reserve or return to the assembly area; in each case conforming to the orders of the higher commander for that particular situation. At times the attack position is designated as the rallying point. In continuing the attack the last previously used rallying point may be designated as the alternate rallying point.

e. **Alternate Rallying Point.**—The alternate rallying point is one selected as a precaution in case the rallying point is not accessible or becomes untenable. The alternate rallying point should be to the rear or to the flank of the rallying point. It should afford defilade and concealment. The position designated as the alternate rallying point is often the last used attack position.



Do not assemble at rallying point and start reorganization before security is posted. Do not crowd vehicles.

Figure 5.—Incorrect procedure for tank units at rallying point.



Post security immediately on arrival at rallying point; conceal vehicles.

Figure 6.—Correct procedure for tank units at rallying point.

10. Principles of Employment.—(See also Chapter 2, paragraph 46 of FM 17-10.).—a. **Allotment and Attachment.**—(1) To be most effective, tanks should be employed in large numbers, on a broad front, and disposed in depth with a view toward surprise effect. Tanks should be attached to the organization whose commander controls the supporting fires. Such attachment assists the maximum close coordination of both artillery and infantry supporting fires and furthers the cooperation between the assault troops and the supporting tanks. Tanks may be attached to assault units making the main effort when the tank objective lies wholly within the unit's zone of action. Attached tanks may disregard their zone of action when the fire of hostile antitank guns located beyond the boundaries threatens the accomplishment of their mission or their safety, and the movement does not interfere with adjacent troops.

(2) Tank units are not normally attached to lower infantry units for long periods of time for reasons of safety and because of the difficulties of maintenance and supply. Tanks should be attached in sufficient time to allow for an adequate reconnaissance, and cooperation and coordination between the infantry commander and the tank unit commander. In the case of a light tank company the period of attachment prior to the attack should be from 8 to 12 daylight hours.

(3) Factors that influence the allotment of tanks and their priority of assignment by higher commanders are as follows:

Allotment:
(a) Number of tanks available.
(b) Terrain.
(c) Hostile defense.
(d) Plan of maneuver.
(e) Economy of tanks.

Priority of Assignment:
(a) Main attack.
(b) Reserve (when large numbers are available they are assigned to the infantry reserve).
(c) Holding attack.

(4) When a tank unit is attached to an infantry organization the tank commander, in addition to his command functions, becomes the advisor to the infantry commander in matters pertaining to tank employment. The infantry commander must not impose duties upon the tank unit commander that will separate him from his command while it is engaged. The primary duty of the tank unit commander, as a staff officer, is to make an early reconnaissance of the area in which the unit to which he is attached is to operate, to the end

that he can make recommendations for the effective employment of the tanks. Tanks should be employed in a manner calculated to permit them to take full advantage of their four favorable fundamental characteristics and with a careful regard for their unfavorable characteristics. This imposes on the infantry commander to whom tanks are attached the responsibility of selecting a suitable mission which is reasonably within the tank's power of accomplishment. In making a decision to employ tanks the following principles should be applied:

b. **Objective.**—(1) Tank attacks are planned to strike unexpectedly against definite terrain objectives over ground suitable for tank action. Preferably, tanks are engaged against definitely located resistance; however, details of the hostile dispositions are frequently unknown.

(2) When the tactical plan of the commander permits, the combined tank and foot elements of the attack should be sent through enemy weakness. A frontal attack against a position which is well organized with unreduced antitank defenses will result in such losses and disorganization as to neutralize the tank effort. Commanders should be prepared to commit their tanks promptly against hostile weakness—discovered or made—provided such action promises to insure the success of the main attack.

(3) The tank objective coincides with that of the supported troops, with whose action their employment must be coordinated. Tanks should be assigned but one objective at a time as the assignment of successive objectives tends toward lack of control both by the tank unit commander and by the commander of the infantry unit which they support. When tanks are to be used against successive objectives the tank unit must be given opportunity for a withdrawal from action and for reorganization prior to the assault of each objective.

(4) Until the hostile resistance is broken, tanks do not usually operate beyond the effective range of infantry supporting weapons.

(5) The light tanks are assigned the same initial objective as the assault battalions with which they are operating.

(6) Tanks advancing through a hostile position cannot be expected to destroy all resistance; neutralization lasts only while they are in close proximity to hostile weapons. The use of tanks in depth (echelons and waves) increases destructive action and permits neutralization to be maintained over a deep area for a considerable time.

(7) The size of an area which can be neutralized by a tank unit depends upon the terrain and the hostile defenses. In general, the maximum area over which a tank platoon can maintain neutralization is limited to a frontage of about 400 yards and a depth slightly less.

(8) The tank action terminates when the foot troops occupy the objective assigned to the accompanying tanks. The tanks then move to a rallying point where orders are issued for continuing the attack or for reorganizing and reservicing the unit.

c. **Depth.**—(1) Employment in depth gives power and continuity of effort in the support of an attack. Depth means the employment of tanks in successive echelons and waves. The use of tanks in depth accomplishes the neutralization of the objective prior to the arrival of the assaulting foot troops.

(2) The tank attack is usually launched in three echelons, each echelon in a series of waves.

(a) The first echelon of attack, preceded by neutralization by combat aviation, artillery, and other supporting weapons is directed against the antitank defenses, artillery, command posts, and other rear installations. Units in this echelon destroy first the enemy antitank defenses and second, enemy artillery. They attack enemy infantry only when hindered by it in fulfilling their primary mission.

(b) The units of the second echelon follow the first echelon at such distance that the enemy will not have time to reform his antitank defenses. These units destroy hostile automatic guns and personnel and clear the way for the advance of infantry. Antitank guns passed over by the first echelon must be silenced by the leading waves of the second echelon.

(c) The units of the third echelon advance with the infantry, destroy hostile machine guns passed over by the second echelon, and hostile personnel. The mission of this echelon is to assist the advance of the infantry. The tanks may lead the infantry attack if resistance is still heavy. If resistance has been broken by the first two echelons, tanks in the third echelon follow the infantry, prepared to attack isolated resistance as necessary. These tanks also protect the infantry from counterattack, particularly by mechanized forces.

d. **Terrain.**—Tanks operate most effectively over rolling terrain composed of small ground forms of low relief. The presence of cover in the form of small patches of woods or other vegetation is an advantage. The necessity of attacking over open ground, level, or of uniform slope, increases the efficiency of the hostile antitank weapons, although this is offset in part by the increased maneuverability and control of the tanks. The latter type of terrain is preferable to areas which are heavily wooded or intersected by tank obstacles such as deep streams, swamps, deep ravines and steep embankments. Such terrain is definitely unfavorable and tanks should not be employed over it. Before arriving at a decision to employ tanks a thorough reconnaissance of the terrain must be made. Just because ground appears impassable for tanks does not justify dismissal of possibility of attack either by yourself or the enemy over such ground. Only by detailed reconnaissance can passability be determined. In many cases passage over difficult ground is justified by surprise gained.

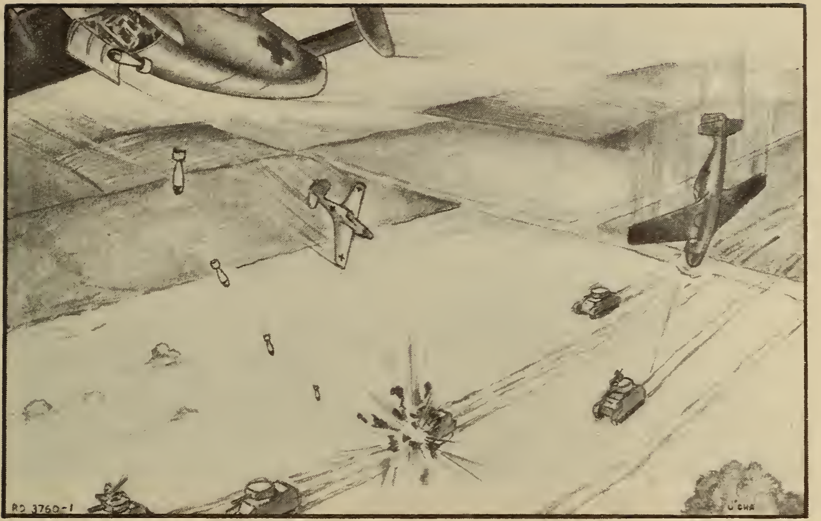
e. **Reconnaissance.**—(1) The adverse effect of unfavorable terrain upon tank operations is so pronounced that a thorough reconnaissance should be made of the ground over which it is proposed to employ tanks as well as the routes over which they are to travel from the assembly area to the attack position. This reconnaissance is based more on time-distance than space-distance. The factors that govern time-distance are as follows: changes in weather conditions, fog, smoke, and darkness. Prominent terrain features and outstanding works of man provide means of aiding tanks to maintain direction and operate within their zone of action. Reconnaissance must always precede the final decision to employ tanks.

(2) Tank ground reconnaissance differs from the usual ground reconnaissance made by infantry units. In tank units there is never a reconnaissance in force. No combined security and reconnaissance mission such as an advance, flank or rear guard mission is ever assigned to a unit composed entirely of tanks. Ground reconnaissance for tanks is confined to the friendly territory in rear of the line of departure. Tank unit commanders reconnoiter for sites to be used as a detraining point, tank parks, assembly areas, and routes forward from these sites. From the assembly area forward to the line of departure reconnaissance is initiated by the tank unit commander concerned to obtain information in order to issue orders for the employment of tanks. The rallying point and objective are pointed out to the tank personnel whenever visible. Points in front of the friendly front line are indicated from a position or positions on or in rear of the line of departure.

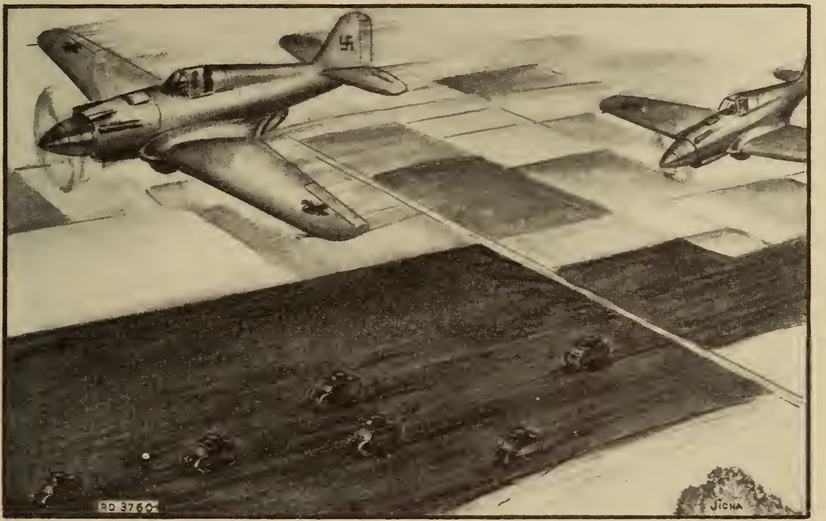
f. **Surprise.**—The plan of tank employment should consider the element of surprise in order to prevent the enemy from readjusting his defensive fires to meet the attack. The essential requisites for surprise are secrecy and speed. The sudden appearance of a large group of tanks usually can be expected to weaken the morale of the adversary, which is an essential aid for full exploitation of the shock action of the tanks.

g. **Concealment.**—Surprise is essential to the success of small scale tank operations. The attainment of surprise involves concealment. Careful use of available concealed and covered approaches will greatly assist in surprise. The use of concealed and covered areas as assembly, bivouac, and attack positions is essential. Extensive use of natural and artificial means of cover and concealment before and during the attack is necessary. Since aerial photographs reveal the nature of exposed tanks more by their shadows than by their forms, the prevention and distortion of shadows is very important. Brush and trees may be used in wooded country and nets and paulins in open terrain for tank camouflage. Tank tracks often disclose tank concentrations. Tracks may be obliterated by dragging heavy brush behind the tanks. When a concealed position is occupied at night, the tracks leading to the position should be removed before daylight as they show up unmistakably on an aerial photograph. Great care in the concealment of tanks is necessary during the entire move to the front and the success or failure of the ensuing tank action will often depend upon the unobserved occupation of a forward position.

The following figures, **7, 8, 9, 10, 11, 12,** and **13** illustrate correct and incorrect use of cover and concealment by tanks. See also chapter 2, paragraph 27 of FM 17-10.

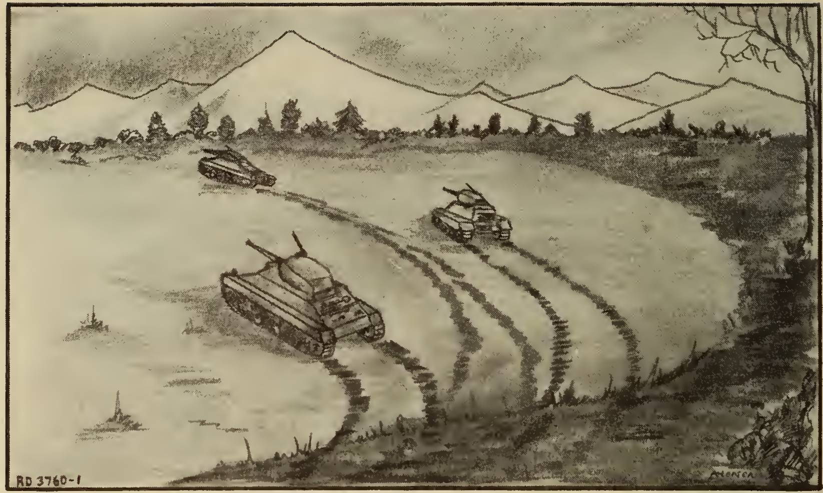


(1) Do not drive over a light-colored field when it can be avoided.

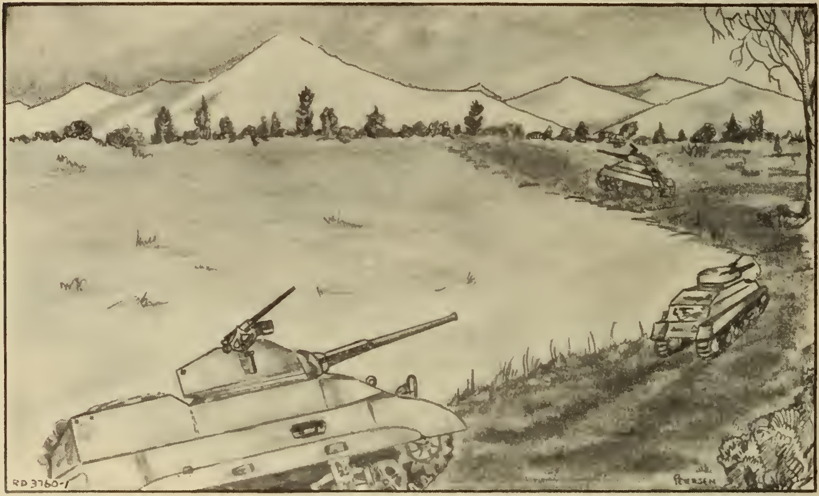


(2) Use dark background as far as possible for movement.

Figure 7.—Use dark background.

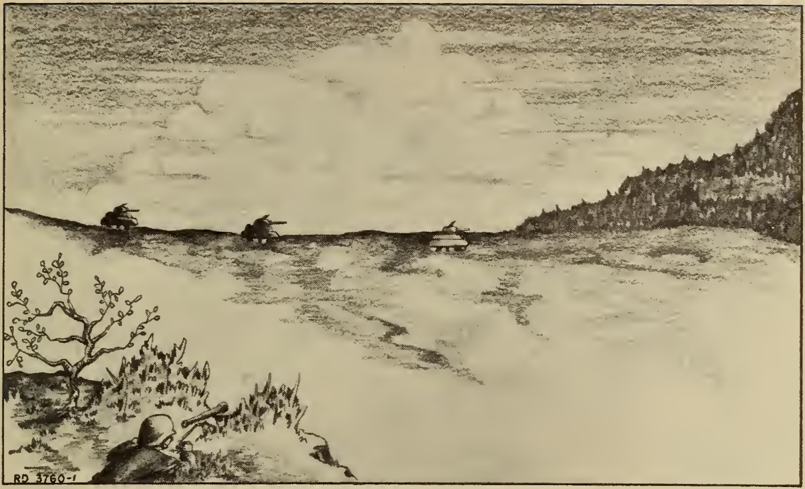


(1) Do not take a short cut over a light-colored field. A track is left which is visible to enemy air observers for hours.

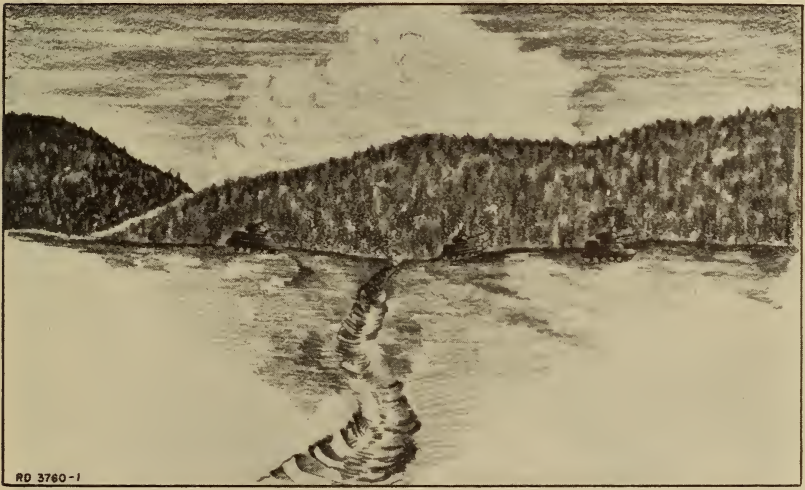


(2) Go around the field, thus preventing telltale tracks.

Figure 8.—Stay on dark ground.

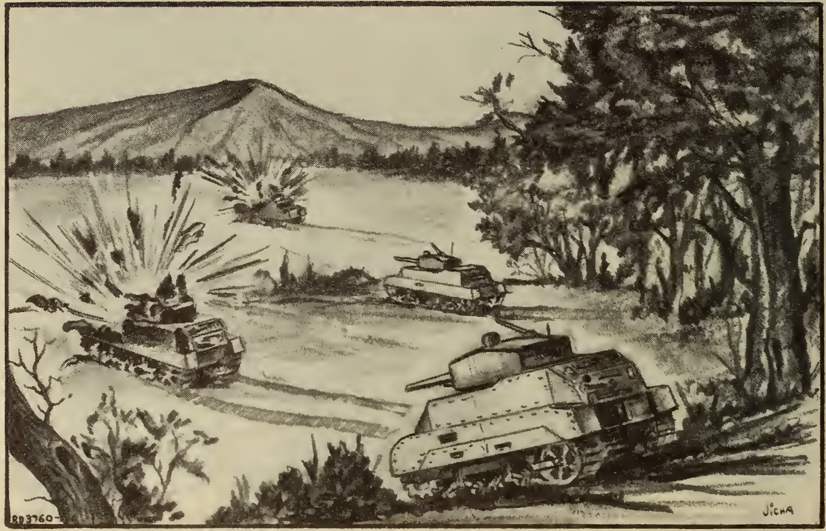


(1) Do not advance in front of a light background.

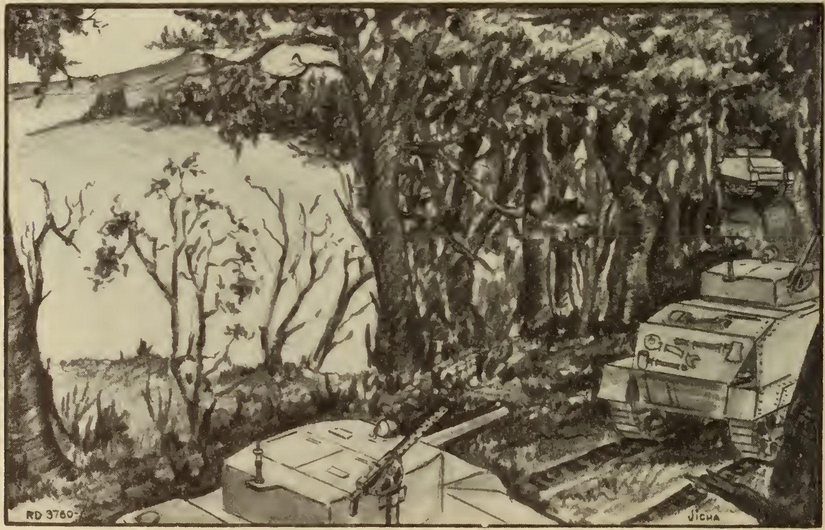


(2) Use dark background to cover advance.

Figure 9.—Use dark background whenever possible.

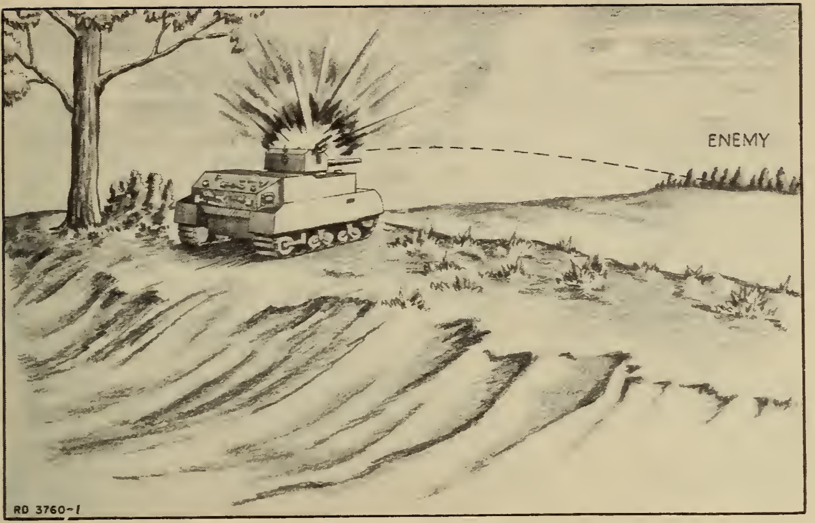


(1) Do not take a short cut across open fields.

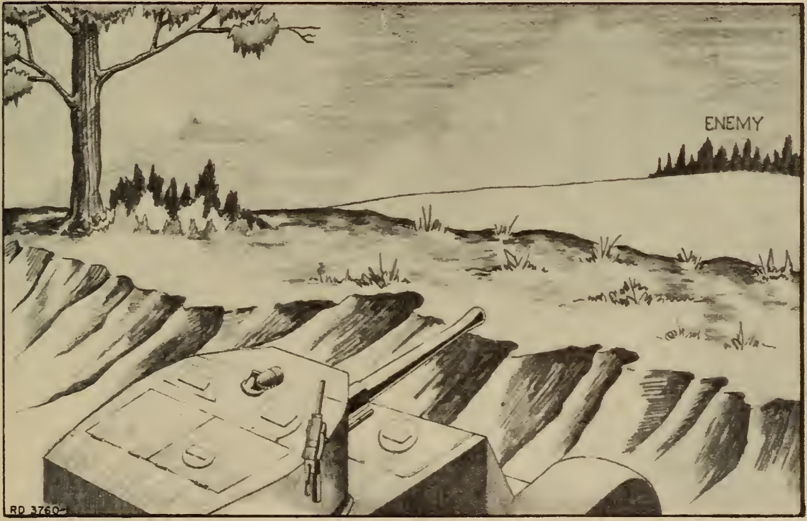


(2) Go around open fields in order to advance under cover or concealment.

Figure 10.—Avoid open fields.

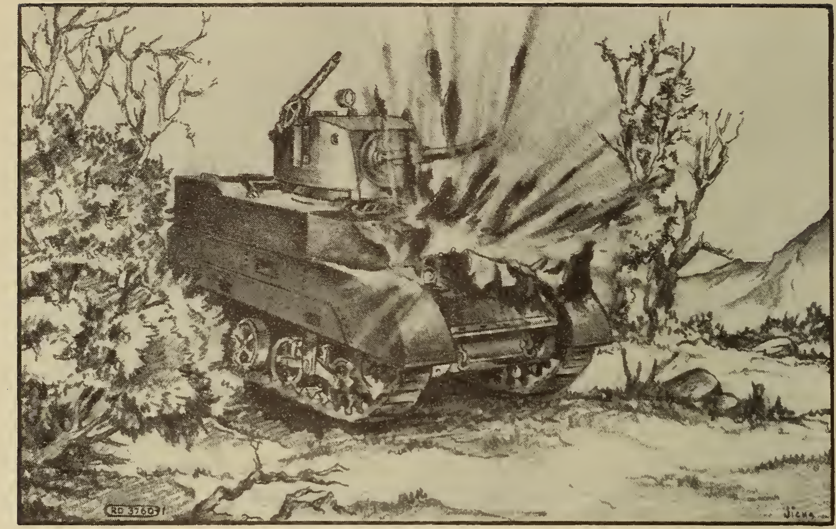


(1) Do not take position on top of a hill.

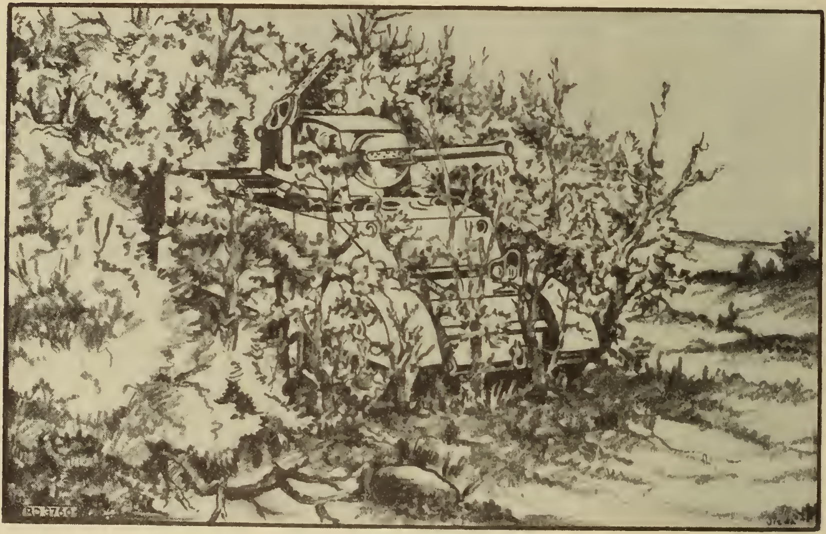


(2) Take position on the slope, giving defilade to the tank hull.

Figure 11.—Avoid positions on open hills.

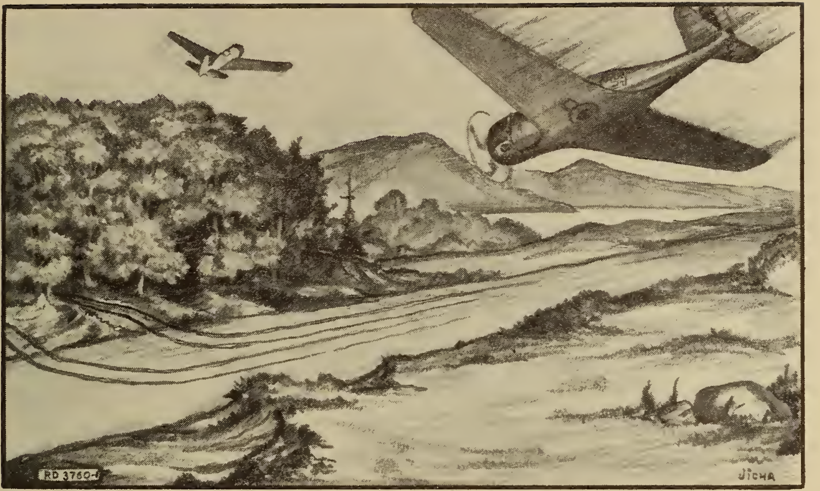


(1) Do not take position near bushes.

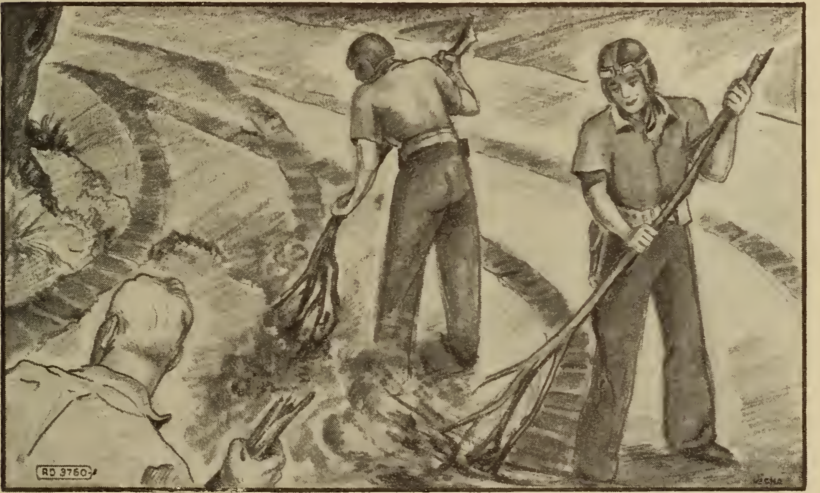


(2) Move into bushes and take position.

Figure 12.—Take advantage of all available cover or concealment.



(1) Do not neglect to blot out the tracks left on the road by turning tanks. Even if tanks are well camouflaged in woods, the tracks will betray the position of the unit.



(2) Blot out the tracks immediately, thus leaving no clues to enemy airplanes.

Figure 13.—Blot out tracks left by tanks.

h. **Maneuver.**—A zone of action should be assigned that is wide enough to permit the tanks to outflank antitank defenses and strike the objective from a decisive direction. Tanks should take full advantage of their ability to make flanking attacks. When conditions make it necessary for tanks to depart from the zone of action of the unit to which they are attached, precautions should be taken to prevent interference with troops operating in the adjacent zones. The practice of using light tanks as stationary redoubts will result in their loss although they may halt momentarily to deliver more accurate fire on remunerative targets such as infantry in close column, antitank guns, and armored vehicles.

The following figures, 14, 15, and 16 show tanks halted to fire on remunerative targets.

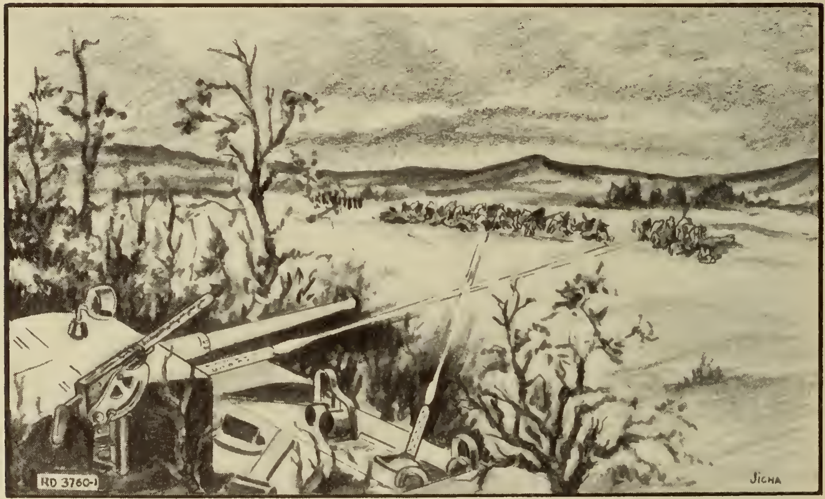


Figure 14.—Tank halted to fire on enemy dismounted column with machine guns.

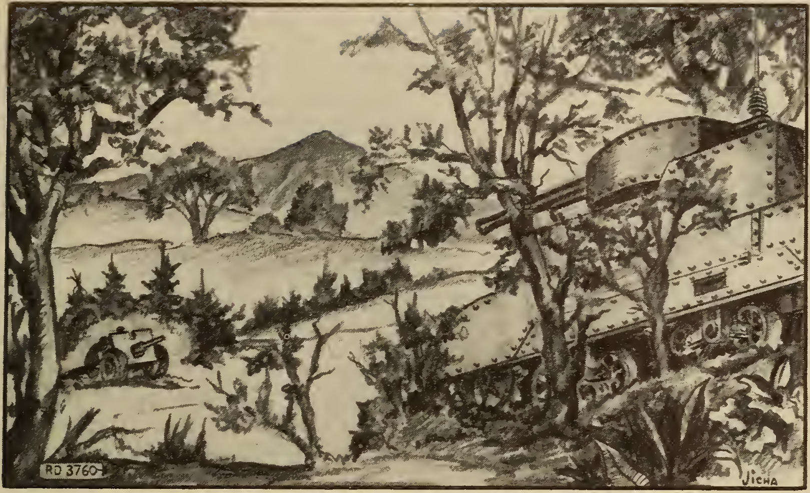
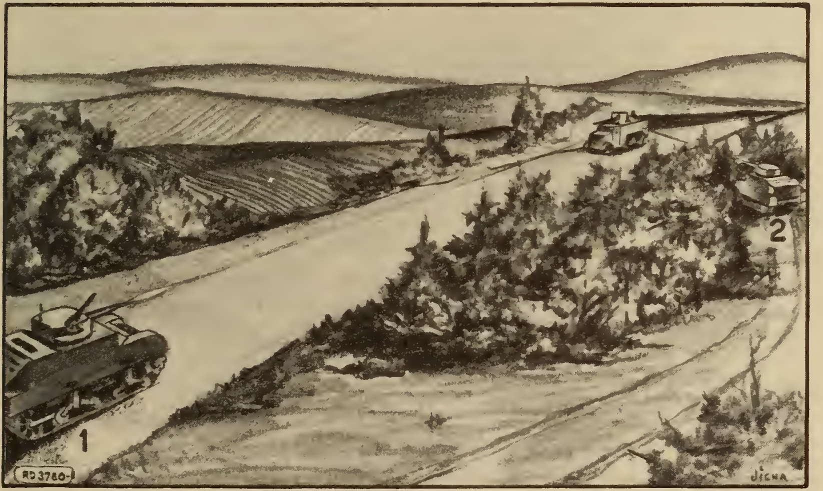


Figure 15.—Tank halted to fire 37mm gun at enemy antitank gun.



Tank No. 1 halts to fire while No. 2 maneuvers to the flank to fire on the enemy vehicle.

Figure 16.—Tanks firing on enemy armored vehicle.

i. **Support.**—(1) **General.**—A tank attack should be supported in the same way, and to the same extent as infantry. Tanks should not ordinarily be required to make an unsupported attack against an objective possessing strong antitank defenses. Every means of support available to the infantry commander should be employed to blind, neutralize, or destroy the antitank defenses. Artillery furnishes ground support to the limit of its effective range. Smoke is used to blind the defenses. Aviation bombards or smokes the defenses located beyond effective artillery and mortar range. Engineers should be made available to the tank unit in sufficient time to eliminate terrain obstacles behind the line of departure and should be prepared to assist in the passage of obstacles between successive objectives.

(2) **Engineers.**—Engineers assist and cooperate with tanks by preparing routes of passage for the tanks. This includes reinforcing or installing bridges for tanks to cross unfordable streams and canals; and the clearing of passage through dense woods. Engineers also remove any antitank mines in front of the friendly position and prepare crossing points over railroads. Engineers may also assist in camouflage work. The necessary allotment of engineers should be made or requested by the responsible commander. Engineer operations are coordinated with the scheme of maneuver so that supporting troops neutralize hostile troops interfering with engineer activities.

(3) **Artillery.**—The success of tank attacks depend in a large part on the success of the initial destruction of enemy antitank guns. These weapons will be difficult to locate until they open fire; however, the general region which they are most likely to occupy can often be determined. The artillery places its fires on these areas during the preparation and while the leading echelon is advancing to the main line of resistance.

Generally the best artillery preparation for a tank attack will be brief but intensive. Fires are placed to neutralize effective hostile observation and antitank weapons and, at the same time, retain the advantage of surprise. These preparation fires are placed on areas known or believed to contain antitank weapons; this will usually be the enemy main line of resistance. Fires are delivered to give direct support to the leading tank echelons. These fires are shifted to targets on the flanks or in rear before tanks reach the first objective. On shifting from the main line of resistance the artillery fires on more distant antitank guns and automatic weapons, blinds hostile observation, and attacks reserves and command posts.

Prearranged fires are regulated by time schedule or artillery observation (air or ground) supplemented by radio request from the tank unit commander. Ground observation by artillery to determine the regulation of prearranged fires after concentrations have lifted from the first objective is supplemented by signal or radio call from tanks. Another method is through artillery liaison personnel who follow the attack closely. This personnel may accompany the tank unit commander in a tank and by means of radio cause fire to be placed on new targets. Air observation may observe the progress of the tank attack and keep the artillery informed.

(4) **Infantry supporting weapons.**—(a) The initial primary mission of supporting weapons should be the support of the tanks by neutralization of hostile antitank guns. All infantry supporting weapons should remain in surveillance of well-defined areas and fire on hostile antitank guns as soon as they are revealed by their flashes. Machine guns initially support the advance of the tanks into and through the first hostile defenses by firing on antitank gun positions on or near the enemy front lines. Mortars fire (initially) on more distant or defiladed enemy antitank guns and enemy artillery pieces located well forward.

(b) Both accompanying riflemen and machine guns which have moved forward will afford close-in protection to tanks while the latter are on the objective. Infantry will fire tracers to indicate targets to accompanying tanks.

(5) **Smoke.**—The tactical use of smoke is dependent upon favorable weather conditions. Smoke is used in support of tank units to:

(a) Screen the movement of tanks.

(b) Blind hostile observation.

(c) Neutralize hostile antitank guns.

(d) As a deceptive measure to confuse the enemy as to the real point of attack.

The use of smoke in any great quantity must be coordinated by higher commanders. Lack of such coordination may result in smoke drifting across the zone of action of adjacent units thus hindering their action.

(6) **Aviation.**—(a) **Observation aviation.**—(1′) Observation aviation will in some cases work directly with a tank unit in the attack. The mission or missions assigned will govern the direct contact to be established. Radio communication is generally used but may be supplemented by visual signals. Requests for observation aviation support for a tank attack should be made by the commander of the unit to which the tanks are attached.

(2′) When supporting tank units, one or more of the following missions may be performed by observation aviation:

(a′) Furnishing aerial photographs.

(b′) Executing reconnaissance to determine suitability of terrain.

(c′) Furnishing information regarding location and character of hostile troops; their reserve areas, communication centers, antitank weapons, and tank traps or other obstacles.

(d′) Carrying tank officers on reconnaissance.

(e′) Informing tank units and higher headquarters of location and movement of both friendly and hostile troops.

(f′) Observing for supporting artillery.

(3′) Definite arrangements for the execution of the aviation mission will be effected by conference between the tank unit commander and the supporting pilot-observer team. The pilot-observer teams must be informed of the complete plan of attack. This includes the plan for coordination between the tank unit, the infantry, the supporting artillery, and any other supporting units. The ground unit or units with which radio contact must be maintained will be decided in accordance with the assigned observation missions. The technical details of the radio communication to be established must be announced in sufficient time to allow this communication to be established prior to the plane leaving the ground.

(4′) The observation airplane should maintain surveillance over the tank unit from the time the leading tank echelons leave their attack position until the tanks have returned to the rallying points for reorganization. By maintaining radio contact with the supported infantry and the supporting artillery, the air observer can keep them constantly informed of the progress of the tank action. The air observer should be on the alert to watch for and report the hostile reaction to the operation. A critical period for the tanks and for the supported infantry is that time just following the capture of the objective before the tank unit has reassembled and reorganized, and before the foot troops have completed their reorganization on the terrain recently captured. Hostile tanks or other highly mobile elements, by surprise counterattacks at this time, may nullify all that the operation has accomplished.

(5′) Assistance from air observation is of paramount importance to tank units engaged on pursuit or exploitation missions.

(b) **Combat aviation.**—Combat aviation may assist tanks by attacking (with bombs) enemy light artillery, concentrations of hostile mobile antitank guns, and hostile tank units that can be used to counterattack the friendly assaulting tanks. Combat aviation should not be employed against objectives the destruction or neutralization of which can be effected by available ground weapons, but should be used as an adjunct to reduce those objectives that cannot be effectively neutralized by artillery fire. Dive bombers are especially adapted to this type of work.

j. **Supports and Reserves.**—(1) **Platoon.**—The tank platoon holds out no support.

(2) **Company.**—The company commander holds out a support, normally of one platoon, which he usually controls by personally leading it. It may follow directly in rear of the attacking platoon or it may be echeloned to one flank, depending on the situation. He uses this support to influence the action, employing it against the enemy at a critical point, to meet an unexpected threat, or to give depth and strength to the tank attack.

(3) **Battalion.**—The battalion commander may hold out all or a part of a company initially as a reserve. He personally leads this reserve and may follow the assault elements in an echeloned formation to one flank or he may keep it centrally located. He uses his reserve to assist companies unable to advance, to meet an unexpected flank attack, to repulse a counterattack, or to give depth and increased shock action to the assault.

k. **Coordination and Cooperation.**—(1) **Coordination.**—The action of tanks must be fully coordinated with that of all other arms participating in an operation. This coordination is achieved through command channels by thorough planning and the issuance of instructions in sufficient detail to insure complete understanding by all units involved. All units must cooperate to the fullest. The following must be particularly coordinated:

(a) Infantry supporting fires.
(b) Advance of foot troops.
(c) Artillery fires.
(d) Air observation and air supporting fires.
(e) Use of smoke.
(f) Engineer support.
(g) Supply, maintenance, and evacuation.

(2) **Cooperation.**—(a) Dismounted troops assist the tanks by:

(1′) Placing all available fires on known or suspected location of hostile antitank guns and observation posts.

(2′) Advancing rapidly behind the tanks to seize and hold positions overrun by the tanks.

(3′) Seizing ground from which a tank attack may be launched.

(4′) Stalking hostile antitank guns using methods of infiltration.

(b) Tanks assist foot troops by:

(1′) Neutralizing or destroying hostile automatic weapons likely to hold up the advance of the foot troops.

(2′) Making passage through wire or other obstacles.

(3′) Maintaining neutralization of hostile resistance by attack in depth until arrival of foot troops on the objective.

11. Form of Attack.—a. Based on all obtainable information the responsible commander formulates a plan of attack. A direct frontal attack is avoided when practicable and is made only when terrain does not permit a flank attack, or against a weak, disorganized enemy force when time is a vital factor. The usual method of attack is by an envelopment. The support elements and part of the attacking force may attack frontally by fire while the remainder of the unit moves under cover to a flank position from which it attacks the hostile rear or flanks.

b. When the following can be answered favorably, an envelopment is particularly indicated.

(1) Is the hostile resistance sufficiently developed to provide the selection of the most remunerative objectives?

(2) The success of an envelopment depends mainly on surprise. Can the forward movement of the tanks to the line of departure be seen or heard at a sufficiently great distance to nullify the probability of surprise?

(3) Reconnaissance must be performed prior to the attack. Can such reconnaissance be performed?

(4) Is there time to arrange for effective supporting fires, especially the fires of infantry weapons?

(5) Can coordination between foot troops and tanks be obtained in the operation?

(6) Can the foot troops occupy and consolidate the ground gained by the tanks?

12. Orders.—The commander responsible for the employment of tank units and other participating arms should include in his order the following:

a. Tank objective(s).
b. Special missions (where applicable).
c. Hour of attack.
d. Attack position.
e. Routes or boundaries (both when applicable).
f. Rallying point and alternate rallying point.
g. Fire support to be rendered to tanks.
h. Means for coordination with other arms and elements of his command, before, during, and after the attack.

13. **Formations.**—a. The formations to be used by any tank unit in a given situation is normally prescribed by the commander of that unit. The attack formations employed by the platoon are:

(1) **Line.**—This formation develops great fire power to the front and is suitable for leading waves of the attack when heavily supported by other weapons. It has no depth and is difficult to control.

(2) **Line of sections.**—This formation might also be column of sections. It does not develop as much initial fire power to the front as does line. However, it lends itself readily to fire and maneuver, one section occupying firing positions to protect the advance of the other. The formation is easy to control.

(3) **Column.**—The column develops little fire power to the front. It is useful primarily for approach marches, passing through woods, and passing defiles. It is the easiest to control.

(4) **Echelon.**—This formation is useful for a flank platoon. It develops great initial fire power either to the front or flank. Control is difficult.

(5) **Wedge.**—Wedge is a modified line-of-sections formation. It affords good fire power to the front and either flank. It is easy to control as far as direction is concerned. However, its fire power is difficult to control due to the fact that the platoon leader is not in a position to see his sections readily.

(6) **Inverted Wedge.**—Without radio, this formation is difficult to control as far as direction is concerned. However, when radio is operating, the platoon leader can keep his platoon under close control as he is able to see all tanks and at the same time search the terrain for targets. He can readily direct the movement of either section by radio. This formation often results in combat when the platoon leader sends one section on an enveloping movement, covers its movement by the fire of the other section, and orders both sections to assault when the enveloping section is in position. For schematic illustration see Figure 17.

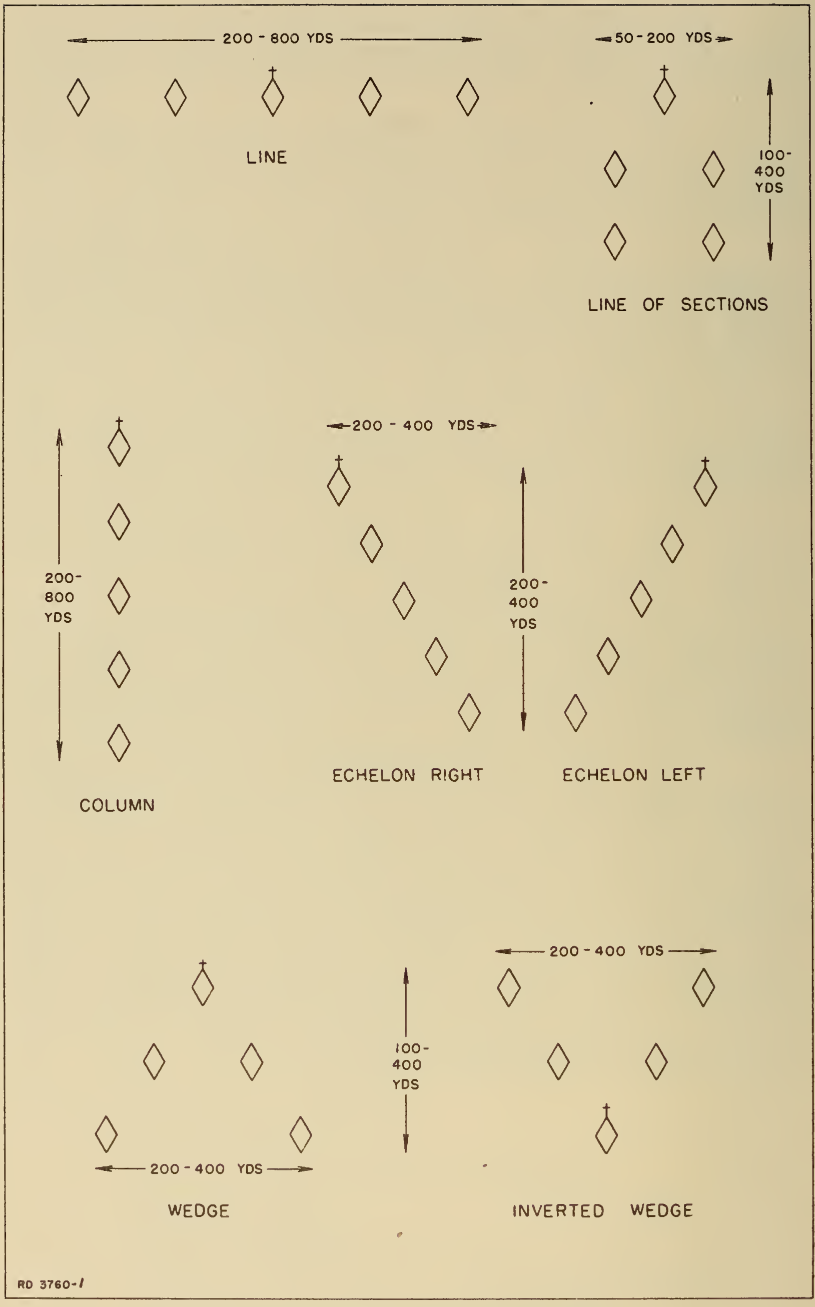


Figure 17.—Tank Platoon Formations.

b. Typical formations for the tank company in the attack are shown in Figure 18. It should be noted that the platoons are shown in only one formation. The platoons may be in any prescribed combat formation such as line, wedge, column, echelon, or line or section columns, depending upon terrain and hostile dispositions.

(1) **Three Platoons in Line.**—This formation is seldom used. It provides no support, is difficult to control, and has no power of sustained effort.

(2) **Two Platoons in Assault with One in Support.**—This formation is easier to control than line formation and affords a reserve for influencing the action, but has less sustaining power than column formation. The support platoon is usually disposed toward the exposed flank.

(3) **Column.**—The column affords maximum control and sustained power. It is the formation for a penetration when the company is not supported by another company. It has the disadvantage of developing very little initial fire power.

(4) **One Platoon in Assault with Two in Support.**—This formation is suitable when the situation is vague. Deployment to right or left is facilitated.

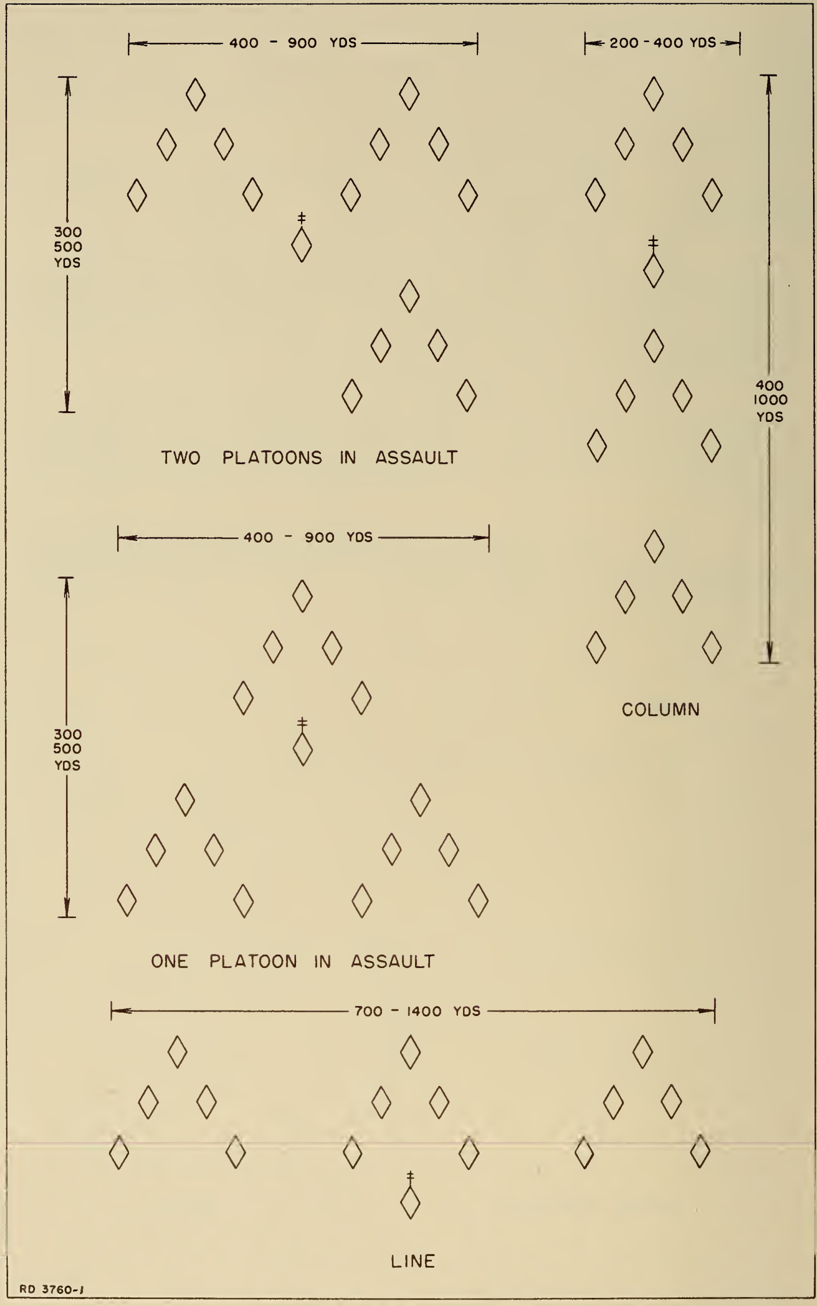


Figure 18.—Tank Company Formations.

14. Control.—The control of tanks in action, by the commanders of units is accomplished in the following ways:

- a. Communication.
    - (1) Visual signals:
        - (a) Arm and hand.
        - (b) Flags.
        - (c) Lights.
    - (2) Radio, voice or key.
    - (3) Messengers, including pigeons.
    - (4) Pyrotechnics.
- b. Example of leader.
- c. Designation of:
    - (1) Boundaries.
    - (2) Rallying points where control is regained and new orders given.
    - (3) Assigned objectives or missions with a rallying point for each.

The company commander rejoins his unit in the attack position, gives his final orders and takes position from which he can best coordinate and control the company. The platoon commanders usually enter the attack in the leading tank, if in column or echelon, or the center tank if in line or wedge. After once becoming engaged, it is with the greatest difficulty that company and platoon commanders are able to regain actual control of their units prior to the assembly at the first rallying position. It is therefore very essential that the objective and the rallying point be pointed out carefully to the crews of the individual tanks prior to entering action. All details for the prosecution of the attack should be given very clearly. It is very difficult and often impossible for a tank platoon commander, once his unit has become engaged, to execute at will a concentrated fire of more than one tank on a single target. Instructions given to individual tanks, prior to their taking up the initial attack formation should be as explicit as possible and cover all phases of the attack situation that can be foreseen.

15. Communication.—Tank communication may be divided as follows:

a. In rear of the line of departure, communication is accomplished by messenger, radio, and through the usual communication net of the organization to which the tank unit is attached, or which it is supporting. Radio silence is usually imposed on the tank unit while in the assembly area. This allows the reception of radio messages but prevents transmission. Radio transmission within the assembly area would indicate to the enemy the presence of a new unit and may subject the area occupied by that unit to excessive shelling.

b. Between tank units actually engaged (upon leaving the attack position) and command posts or other nearby forces, the radio is almost entirely relied upon. Pyrotechnics may be used and relied upon to some extent but are best used to supplement other means.

c. Between the tanks of a unit engaged a few simple prearranged flag signals may be used but here also the radio is recognized as the most reliable means of communication.

16. **Tactical Dispositions.**—a. The dispositions of tanks, provided the terrain is suitable, are based on the number available, character of hostile defenses, and the plan of attack.

b. In an attack situation involving larger units, there is a main effort and one or more secondary efforts. If the terrain is suitable, the bulk of the tanks available should be used to directly further the main effort. This principle does not preclude the use of tanks in connection with a secondary effort if enough tanks are available without reducing those to be used with the main effort below what are needed. In a situation where the terrain over which the regiment making the main effort is to be employed is such that tanks cannot be advantageously used, it would be proper to use all available tanks in connection with the effort of the other assault regiment. Where several phases of the attack can be foreseen, the commander must decide in which phase or phases he will use tanks, basing his decision on the number of tanks available, the terrain, and the relative importance of the several phases. It must be remembered that tank units can be reorganized and recommitted to action in succeeding phases; although each phase will undoubtedly exact its toll of the effectiveness of the unit and rapidly reduce its initial strength.

17. **Final Attack Preparations.**—a. Following the decision of the higher commander as to his plan of action and the allotment of tanks to his various organizations, the tank unit commander makes his final preparations and dispositions for the attack. Upon arrival in the zone of action he should make as detailed a reconnaissance of the ground over which the tanks may operate as the time will permit in order that he can give sound advice to the infantry commander with whom he is cooperating. He should check the artillery fires which are to be placed on the hostile positions, and plan coordination of future movements of tanks with these fires. He should check to see that artillery fire is not opened on enemy antitank gun positions until just prior to the launching of the attack in which tanks are to take part; for such action, if taken considerably in advance, would cause the enemy to move his antitank guns to new positions that would likely remain concealed until the tanks started their advance. He acquaints himself with the wire communication systems which exist or are to be installed along the line of approach, with a view to getting his various units forward without interfering with these lines. He pays particular attention to the

selection of good attack positions and rallying points as well as routes of approach to the line of departure. He should arrange with the commanders of the units through which tanks must pass for definite coordination for such movement. This applies to the attack of the initial objective and return to the rallying point, the movement into the assembly or bivouac area, and when applicable the movement against succeeding objectives. He should see that routes through rear areas occupied by friendly troops are conspicuously marked. He should request that these routes be guarded by sentries and be announced in the unit order of the foot troops concerned. His preparation and reconnaissance must not be of such length as to preclude reconnaissance by his platoon leaders and tank drivers. Whenever possible, tank drivers should be given an opportunity to observe the terrain over which they are to operate.

18. **Combat Operations of Tank Units.**—a. **General.**—Tanks may precede, accompany, or follow the foot elements. When preceding the foot troops, tanks assist in neutralizing the objective before foot troops cross the line of departure. Tanks may be withheld until assaulting foot elements pass beyond a certain tank obstacle that cannot be crossed without preliminary reconnaissance or preparation. If this procedure is adopted, the attack order should designate the line to be attained by the assaulting foot elements before the tanks cross the line of departure, the engineer unit that is to prepare crossings over the obstacle, and the necessary coordination for the passage of tanks through the assaulting foot troops. Tanks should never be employed over suspected enemy mine fields. Such areas must be carefully reconnoitered by night patrols and the extent of the field definitely established. The area is then avoided or the mines are removed before an attempt is made to cross it.

b. **Approach.**—The approach into combat begins at the time a tank unit enters hostile artillery range. When tanks must pass through the zone of likely hostile ground observation enroute to the assault, good enemy observation points should be masked by smoke and covered by fire from supporting arms before tanks arrive within view. The attack position will be within range of hostile artillery so it is imperative that the area selected offer defilade and concealment for the short time the tanks halt prior to crossing the line of departure. Tanks should not occupy the attack position longer than a few minutes. This time is utilized for a final check of the tanks and to issue final instructions. The tank advance from the attack position is coordinated with the assault of foot troops so the tank unit will reach its initial objective at or shortly after the time when foot troops are scheduled to start their advance. This is best accomplished by having the foot troops leave the line of departure as soon as the tanks have passed through. Tanks should utilize available covered routes from the attack position to the objective. During this stage tanks are employed in passing through or crushing enemy obstacles and operating against enemy front line antitank guns and machine guns. If there are hostile antitank guns in the area, tanks must rapidly close with and destroy them in order to insure their own existence. After the destruction of antitank guns, tanks cruise over the objective, crush machine-gun emplacements and enemy defensive installations, and spray the enemy position with the fire of their own machine guns.

c. **Meeting resistance.**—In meeting resistance, tank units take full advantage of having tanks fire from stationary positions. This is accomplished by fire and movement: fire from positions; movement by rapid and well-planned change from position to position. Depending on the situation and terrain, part of the tanks make use of their fire power from position thus increasing the fire protection given by other supporting arms. Going into "position" means a halt on the field of battle. To reduce the resulting danger of being fired on, the tanks make use of all available cover and concealment.

Tanks halt behind cover or concealment in hull defilade leaving visible only the turret and principle weapon of the tank in order that fire may be delivered on the enemy. As much of the remainder of the tank as possible is under cover or concealed from the enemy. (See Figure 19.)

When it becomes necessary to cross open, flat terrain exposed to hostile fire, tanks seek to decrease their vulnerability by zigzagging or pursuing irregular courses, each tank changing direction independently.

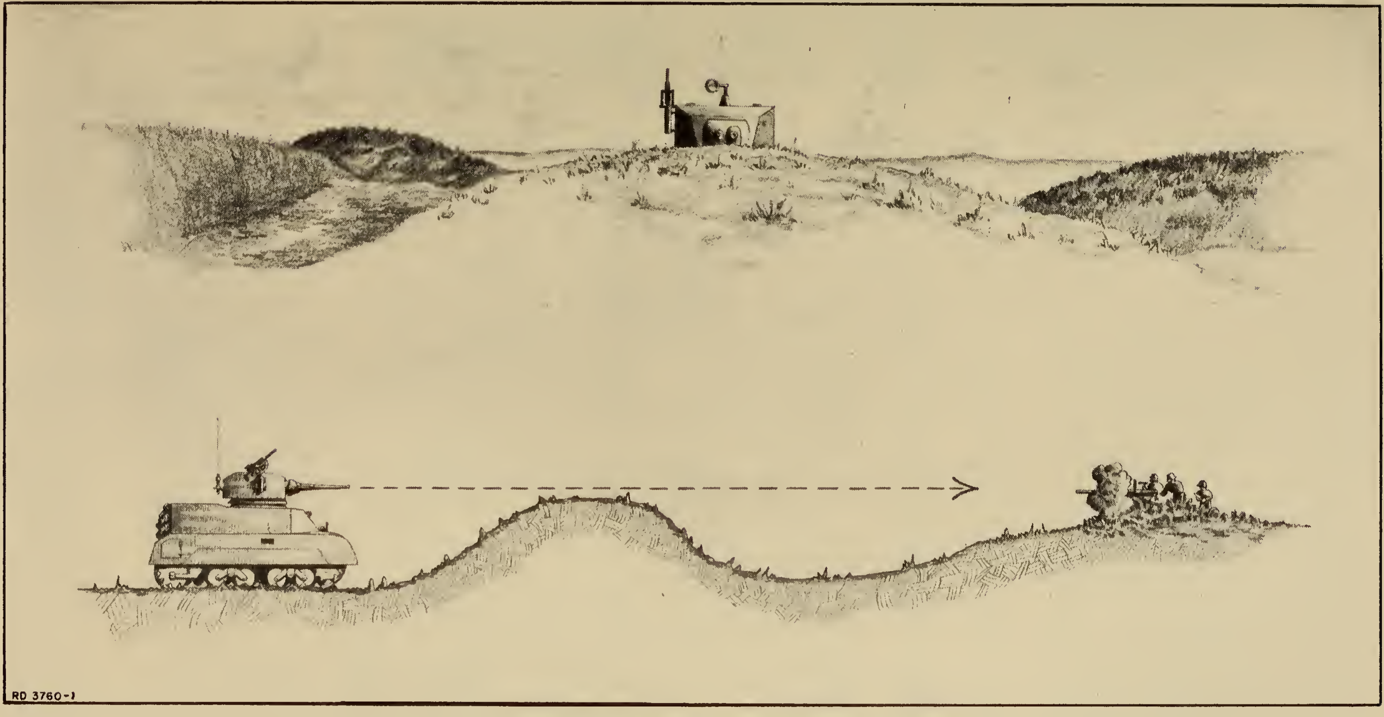


Figure 19.—Use defilade when practicable when halting to fire.

d. **Action upon reaching objective.**—Upon reaching the objective, the tank unit destroys or neutralizes the elements of hostile defense, paying particular attention to machine guns and weapons sited for defense against mechanized units. Tanks must attack antitank guns rapidly and vigorously to insure their own safety. The tank unit patrols (cruises) beyond the objective as far as the limit of supporting infantry fires in order to keep down hostile infantry fire and protect the advance of the friendly infantry. Tanks will break up any local counterattacks that might be attempted at this time. The tank unit should remain on or near the objective until the foot troops occupy it, and the friendly antitank guns are in position to repel hostile mechanized counterattack. Tanks then proceed to the rallying point or, if the immediate mission requires an assault against a second position, resume the advance in the tank assault formation.

19. **Defensive Employment of Tanks.**—a. **General.**—In the defense, tanks are used offensively to support a counterattack. They are not used as stationary machine-gun or antitank gun emplacements. Plans for counterattack include attack by tank units in conjunction with a coordinated attack by reserve troops with all available support used for the action. When tank units are held in reserve, they constitute a powerful mobile striking element to be used in conjunction with other suitable means for offensive operation against the flanks or rear of any hostile penetration or envelopment.

b. **Plans for the defense.**—When a tank unit is to support the counterattack, the ground, where practicable, should be chosen to suit the characteristics of the tanks. The fires of all supporting units must be coordinated with the tank plan of attack. Infantry support must be prompt and vigorous.

c. **Position in reserve.**—Besides affording cover and being beyond effective range of hostile artillery, positions for tank units in reserve must be selected with a view to being invulnerable to surprise attack and to facilitating rapid entry into any probable sector or area of maneuver. A central location is desirable.

SECTION 3

SPECIAL OPERATIONS

20. General.—The tank is primarily a weapon for use in the offense and its chief missions are to make breaches in obstacles and to crush the enemy machine guns and other weapons in order to assist the advance of the foot elements. However, there are many situations, other than during an attack, when tanks may be profitably employed. In all these the primary mission of the tanks remains the same; i.e., to assist foot troops. The following may be considered as special situations:

21. Security.—a. When tanks are assigned to a unit on outpost duty they are located initially with the outpost reserve and are committed for counterattack only. They should not be employed by the outpost commander on reconnaissance missions or patrols.

b. Tanks may be included in an advance guard when it can be foreseen that the advance guard will be required to engage in serious fighting in order to accomplish its mission. When tanks are included in the advance guard they move in rear of the foot elements of the reserve.

c. Rear guards are essentially defensive and protective. When tanks are part of the force constituting a rear guard they may sometimes be profitably employed by making short counterattacks in order to relieve pressure on the force as a whole. These offensive covering actions assist the main force in breaking contact, or in withdrawing to new positions. Tank missions requiring the tanks to cover retiring troops from stationary positions should never be used. In passive rear guard and delaying actions, tanks will ordinarily be used only when counterattacks are ordered. In such cases they are held under control with reserve units and used only by authority of the higher commander.

d. Flank guard actions are protective and defensive in nature. Tanks are normally kept with the main body. In case it becomes necessary for the flank guard to attack and hold a terrain feature covering the route of march, light fast tanks can be rapidly dispatched from the main body to assist in taking the objective. After the objective is taken the tanks should be returned to the main body. This requires good communication between the main body and the flank guard in order that the main body be informed of exactly when and where the tanks will return.

22. Night Operations.—The use of tanks in night operations is generally inadvisable. Such use must be confined to occasions when there is exceptionally bright moonlight, when the foreground can be well lighted by artificial means, when the terrain presents few obstacles to tank advance, and when the noise of movement up to the attack position can be concealed from the enemy. The chief difficulties of tank operation at night are deficiency in means of observation and difficulty of coordination between the tank movements and the advance of the foot troops.

23. Counterattacks.—a. The counterattack is a limited objective attack, the purpose of which is the restoration of the position. A commander may attach tanks to his counterattack unit or he may employ the tanks under his own control to support the counterattack. The latter method may be desirable when the tanks attack over a route different from the route assigned foot elements of the counterattack force. In general, the principles of tank attachment to the foot elements of a counterattack force is the same as attachment to a like unit in the attack. In order to insure the success of a counterattack supported by tanks, a carefully conceived plan must be worked out to include the objective, fire support, and coordination between the tanks and foot troops engaged.

b. The principal role of tanks, when committed in the counterattack, is to assist in retaking parts of the defended area which have been captured by the enemy, or when used on an antimechanized mission to engage enemy tanks which have penetrated the defensive position.

c. Usually, the most favorable time for employment will be after the hostile assaulting troops have outrun the effective support of the bulk of their antitank weapons and before they have time to reorganize, or to consolidate the newly gained position.

d. Tentative areas of tank employment and routes thereto must be reconnoitered with the view to preparing detailed plans for the execution of the counterattack missions assigned by the commander of the supported unit.

e. Plans for counterattack are prepared in complete detail early in the defensive situation. Otherwise the result is likely to be an uncoordinated effort with a confused and disastrous intermingling of friendly infantry, tanks, and hostile troops. Should a counterattack be ordered without such a prepared plan the commander must specify by definite and simple instructions the means and manner by which the passage of the tanks through the engaged foot troops will be accomplished. Such instructions must be transmitted to both the foot troops and the tanks prior to the counterattack. The line of such passage should be an easily identified terrain line or area.

24. Pursuit and Exploitation.—a. **General.**—Tanks may be used to exploit a success or pursue a defeated enemy. When so used, they may be employed with either the direct pressure or encircling force. In either case, the cooperation of bombardment and observation aviation with the tank effort is highly desirable. Against a badly demoralized enemy, they may be assigned objectives beyond the range of supporting weapons and the prompt support of foot troops. In using tank units for pursuit the following should be considered:

(1) Use all tank units with the direct pressure force when—

(a) Terrain over which the encircling force is to operate is unfavorable.

(b) Time is a vital factor.

(c) The enemy is badly disorganized.

(2) Use all tank units with the encircling force when—

(a) Terrain over which the direct pressure force is to operate is unfavorable.

(b) When the enemy has covered his withdrawal by heavy antitank defenses.

(3) When tank units operating with the direct pressure force are to be employed on such a broad front that control is difficult, control is decentralized to smaller units.

b. **Direct pressure.**—Tank units with the direct pressure force seek to pass through gaps that have been opened in the hostile defense, or to break through the enemy covering forces. They then move rapidly deep along the hostile line of withdrawal. Hostile reserves, command posts, and hostile columns are particular objectives. Reconnaissance is pushed to the maximum. Artillery support will be limited. Tank units advance by a combination of fire and movement, using the fire of a part of the tanks to cover the advance of the others when necessary. Control is exercised by giving zones or routes of advance and areas (critical terrain features) as objectives. Liaison airplanes, if available, should be detailed to operate with the tank units. Action is characterized by rapid, audacious thrusts.

c. **Encircling force.**—The encircling force seeks to place itself across the enemy's line of retreat. When practicable, it advances along roads parallel to the hostile line of retreat and attempts to block the enemy at defiles, bridges, and other critical points. When the encircling force is unable to place itself across the line of retreat of the enemy, it attacks him in flank and delays him until the direct pressure force can arrive and complete his destruction.

The commander of a tank unit employed in the encircling force is given a mission-type order which permits him great freedom in the execution of the operations. Routes and objectives are assigned to units by higher commanders. Infantry is used to seize and hold vital terrain features the control of which will block or delay hostile retreat, and to assist in reducing hostile antitank defenses.

25. Jungle Warfare.—Generally, tanks should not be used in jungle or mountainous terain. Under more favorable conditions, however, such as where passable roads are available or the terrain is not too rough or overgrown the use of tanks may be decisive against poorly armed troops. The presence of a large tank force cannot be considered a decisive factor in such operations. In general, tanks should operate only in conjunction with foot troops and the tank column must avoid routes where there is not ample room for change of direction or deployment. Failure to observe the above principles may result in ambush and defeat because such situations preclude the development of the offensive power of the tank unit and leave it open to attack in detail.

Where tanks are used in such terrain infantry leads on the trails, develops the enemy, and the tanks then attack. Such operations are a series of continuous small attacks, at one time infantry leads and at another tanks lead.

In defense in such terrain, infantry defends the trails by placing antitank mines and machine guns to cover them. The open spaces are covered by fire. The tanks are held in reserve to counterattack if the enemy succeeds in reaching the open space.

26. Attack Against Road Blocks.—a. **General.**—(1) Hostile road blocks will be encountered on:

(a) Important roads leading to the front, flanks, or rear of a hostile defensive position.

(b) Roads leading to important hostile rear installations.

(c) Roads leading to the flank of a hostile marching column.

(2) Road blocks may be:

(a) Of a temporary nature, hastily constructed.

(b) Of a semi-permanent nature, very elaborately constructed.

(c) Heavily mined, or not mined at all.

(d) Strongly or lightly defended.

(3) Normally road blocks will be defended by hostile antitank weapons and small arms fire. Important road blocks may be defended by artillery. Information of road blocks on the most important avenues of approach to enemy forces or positions will normally be obtained by reconnaissance agencies and furnished to tank units operating on those roads prior to the time of actual encounter. If alternate routes are available, tanks do not attempt to attack or reduce a road block, but go around it.

b. **Attachments.**—When it is known or anticipated that strong road blocks will be encountered, supporting troops should be attacked to assist in reducing the hostile defense and in the removal or passage of obstacles.

(1) Engineer troops are essential for removal of mines, construction of culverts or bridges, demolition of concrete or semi-permanent obstacles, and excavation of earthworks.

(2) **Artillery.**—Artillery is of great assistance in reducing hostile resistance, neutralization of hostile artillery and antitank weapons, detonating mines and in destruction of barricades.

(3) **Combat Aviation.**—Although it is not normally attached, light bombardment aviation may be directed by higher authority to cooperate in reducing a critical road block. By dive bombing, combat aviation may assist materially in the destruction of barricades, detonation of mines, destruction of antitank guns, and neutralization of artillery.

(4) **Reconnaissance.**—When a road block is encountered, careful reconnaissance must be initiated to secure the following information:

(a) Possible routes around the road block.

(b) Strength and dispositions of hostile defending troops.

(c) Location of antitank mines in vicinity of road block and in adjacent terrain over which maneuver is contemplated.

(d) Possible routes for maneuver with a view to attack on flanks or rear.

(5) **Terrain.**—As in all other operations, the nature of the terrain will exercise a predominant influence on the method of attack of a road block. Normally, road blocks will be constructed at points such as defiles, culverts, bridges, road cuts, swampy areas, densly wooded areas, and other points where the attacking force is confined to the road or where freedom of maneuver is limited.

(6) **Method of Attack.**—Where the terrain permits, the commander always seeks to attack road blocks by envelopment. Artillery elements, if present, seek to neutralize hostile artillery and antitank weapons. Subordinate units attack by fire and movement from one or both flanks. A reserve normally is held out.

Where maneuver is restricted to the vicinity of the axis of movement, the attack must be frontal. Full advantage must be taken of cover and of all available troops to overcome antitank weapons. If the road block is strongly defended, artillery is utilized to the fullest. Against strong defenses in depth, close support aviation, when available, should be utilized to assist the attack. Whe nantitank weapons have been neutralized or destroyed, and gaps have been effected in the barricade by artillery fire, an attempt may be made to send tanks through the gaps in the barricade. After hostile resistance has been completely neutralized, engineer troops are used to remove the barricade and mines or to bridge a passage over the obstacles.

27. Attack Against Hostile Artillery.—In order to attack artillery in position it is necessary to first gain a position outside the firing arc of the guns being attacked and on a flank or in rear of the guns. A small portion of the command may attack by fire from frontal positions as a ruse to engage the attention of the hostile artillery. The main attack is made from the flank or rear, with the tanks closing on the gun positions at maximum speed firing all vehicular weapons. Surprise is essential. The attack must be made on as wide a front as possible with subordinate units attacking from different directions. If possible, guns are crushed when taken. All available support must be given to such attacks.

28. Withdrawals.—The principal role of tanks in the withdrawal is to assist in disengagement of hard-pressed units by counterattacking and disrupting the hostile attack. They should be supported by artillery and combat aviation.

Tank attacks in withdrawals are characterized by fast, aggressive attacks which are limited in depth. Such action is more effective if directed toward a flank. In withdrawing, tank units acquire early information of terrain features including routes and positions for future offensive employment. Tank units may be attached to the general covering force or may be retained by the commander as a mobile reserve. This decision depends to a great extent upon the immediate need of the general covering force for tank support and the composition and disposition of hostile pursuing forces.

29. Landing Operation.—a. The employment of tanks in landing operations may be divided into two parts, first the transportation of the tanks from the transport to the beach, and second, the tactical employment of the tanks after being placed on the beach. Ship-to-shore movement of tanks may be effected by the use of shallow draft, self-propelled lighters. The second part, the tactical employment of tanks as to the time of commitment and objectives after being placed on the beach, must be decided from a consideration of the following:

(1) The situation (based upon the character of known hostile defenses).

(2) The terrain over which the tanks must operate both on the beach and to the objective.

(3) The strength of antiboat and antitank defenses.

(4) The prior aviation reconnaissance (including photographs).

(5) The effectiveness of naval gunfire and aviation support during the approach to the beach and the attack.

(6) The presence of sufficient fighting aviation to maintain command of the air during the progress of the tank lighters to the beach.

(7) The ability of the foot troops to occupy and consolidate the ground gained.

b. A careful study of the information available relative to the above points will determine whether tanks should be the first units to arrive on the beach and carry out their mission of assisting the landing of foot troops, or should follow at a later time in order to exploit the initial success of the foot troops.

c. Tanks, having reached the beach, are employed in accordance with the principles of land operations within the limits imposed by supplanting artillery fires with ships gunfire and bombardment aviation fire support.

SECTION 4

TABLES OF ORGANIZATION

Scout Company, Tank Battalion (Light). Approved: 15 April, 1943.

Tank Company, Tank Battalion (Light). Approved: 15 April, 1943.

Headquarters and Service Company, Tank Battalion (Light). Approved: 15 April, 1943.

Tank Battalion (Light). Approved: 15 April, 1943.

Approved: 15 April 1943

TANK COMPANY
TANK BATTALION (LIGHT)

Marine Corps
Table of Organization
E-76

Designation: Company ___, ___ Tank Battalion

	1	2	3	4	5	6	7	8
1	UNIT	Company Headquarters			Tank Platoon			
		Headquarters Section	Tank Section	Maintenance Section	Platoon Headquarters	Tank Squad	TOTAL PLATOON (Hq & 5 Squads)	TOTAL COMPANY (Hq & 3 Platoons)
2	Captain	1c						1
3	Commanding Officer	(1)						
4	Lieutenant	1c			1c		1	4
5	Executive Officer	(1)						
6	Platoon Commander				(1)			
7	TOTAL COMMISSIONED	2			1		1	5
8	Marine Gunner (Motor Transport)			1c				1
9	Maintenance Officer			(1)				
10	TOTAL WARRANT OFFICER			1				1
11	First Sergeant (585)	1c						1
12	Gunnery Sergeant		1c	1c				2
13	Ordnance maintenance (OP) (913)			(1)				
14	Section chief (652)		(1)					
15	Technical Sergeant			1c				1
16	Mechanic chief (QM) (337)			(1)				
17	Platoon Sergeant (651)				1c		1	3
18	Staff Sergeant			2c				2
19	Mechanic, engine (QM) (909)			(1)				
20	Radio electrician (CP) (542)			(1)				
21	Sergeant	1	4	7	2	1	7	33
22	Blacksmith and welder (EP) (256)			(1)				
23	Machinist (QM) (114)			(1)				
24	Maintenance, radio (CP) (174)				(1)c			
25	Mechanic, artillery (OP) (913)			(1)				
26	Mechanic, engine (QM) (909)			(1)				
27	Mechanic, motor (QM) (014)			(1)				
28	Mechanic, tank (QM) (908)			(1)				
29	Reconnaissance (744)	(1)c						
30	Supply and property (821)			(1)				
31	Tank commander (795)		(4)r		(1)r	(1)r		
32	Mess Sergeant (C) (824)			1				1
33	Chief Cook (C) (060)			1				1
34	Corporal	3	8	5	5	2	15	61
35	Armorer (OP) (511)			(1)				
36	Carpenter (EP) (050)			(1)				
37	Clerk, company (405)	(1)						
38	Maintenance, radio (CP) (174)			(1)c				
39	Mechanic, engine (QM) (661)				(1)			
40	Mechanic, gyro-stabilizer (OP)			(1)				
41	Mechanic, motor (QM) (014)				(1)			
42	Mechanic, tank (QM) (660)			(1)	(1)			
43	Operator, radio (CP) (776)	(1)c						
44	Operator, radio; machine gunner (CP) (776)		(4)p		(1)p	(1)p		
45	Reconnaissance (744)	(1)c						
46	Tank driver (736)		(4)p		(1)p	(1)p		
47	Field Cook (C) (060)			1				1
48	Assistant Cook (C) (060)			1				1
49	Private (including 1st Class)	11	4	6	4	1	9	48
50	Barber (022)			(1)				
51	Cobbler (204) (d)			(1)				
52	Driver, truck (345)	(5)c		(3)c	(2)c			

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RD 376C -1

Designation: Company ___, ___ Tank Battalion

	1	2	3	4	5	6	7	8
		Company Headquarters			Tank Platoon			
53	UNIT	Headquarters Section	Tank Section	Maintenance Section	Platoon Headquarters	Tank Squad	TOTAL PLATOON (Hq & 5 Squads)	TOTAL COMPANY (Hq & 3 Platoons)
54	Private (including 1st Class) - continued:							
55	Gunner; assistant tank driver (166)		(4)p		(1)p	(1)p		
56	Mechanic's helper (014)			(1)	(1)			
57	Operator, radio (CP) (776)	(1)c						
58	Other duty (521)	(5)						
59	TOTAL ENLISTED	16	17	26	12	4	32	155
60	TOTAL MARINE CORPS	18	17	27	13	4	33	161
61	Carbine, .30-caliber, M1	12	1	9	5		5	37
62	Gun, submachine, .45-caliber		4		1	1	6	22
63	Pistol, .45-caliber		12		3	3	18	66
64	Rifle, .30-caliber, M1	6		18	4		4	36
65	Tank, Army light, w/armament, radio-equipped (GF/RU)		3			1	5	18
66	Tank, Army light, recovery (t)			1				1
67	Steam cleaning unit, high pressure, portable, trailer-mounted, complete			1				1
68	Trailer:							
69	-1-ton, 2-wheel, cargo			1	2		2	7
70	-1-ton, 2-wheel, greasing			1				1
71	-1-ton, 2-wheel, stockroom			1				1
72	-1-ton, 2-wheel, water, 300-gallon			1				1
73	-5-ton, 4-wheel, machine shop, complete			1				1
74	Truck:							
75	-1/4-ton, 4 x 4	2						2
76	-1/4-ton, 4 x 4, radio-equipped (TCS)	2						2
77	-1-ton, 4 x 4, reconnaissance	1						1
78	-2½-ton, 6 x 6, cargo			2	2		2	8
79	-2½-ton, 6 x 6, wrecking			1				1

c-Armed w/carbine.
(C)-Commissary branch.
(CP)-Communication personnel.
(d)-Cobblers from various units may be grouped to operate shoe and textile repair unit as required.
(EP)-Engineer personnel.
(OP)-Ordnance personnel.
p-Armed w/pistol.
(QM)-Quartermaster personnel.
r-Armed w/submachine gun.
(t)-To be furnished when standardized.

NOTES:

Tank Section, Company Headquarters, and Platoon Headquarters each include one (1) reserve tank crew.

Maintenance personnel and equipment in platoons may be grouped in Company Headquarters when company operates as one unit.

Serial number in parenthesis refers to specialist qualification as shown in AR 615-26.

RD 3760 -1

Approved: 15 April 1943

SCOUT COMPANY
TANK BATTALION (LIGHT)

Marine Corps
Table of Organization
E-77

Designation: Company "D" (Scout), ___ Tank Battalion

1		2	3	4	5	6	7
		Company Headquarters		Scout Platoon			
1	UNIT	Headquarters Section	Maintenance Section	Platoon Headquarters	Scout Section (3-Car)	TOTAL PLATOON (Hq & 2 Sections)	TOTAL COMPANY (Hq & 4 Platoons)
2	Captain	1c					1
3	Commanding Officer	(1)					
4	Lieutenant	1c		1c		1c	5
5	Executive Officer	(1)					
6	Platoon Commander			(1)		(1)	
7	TOTAL COMMISSIONED	2		1		1	6
8	Marine Gunner (Motor Transport)		1c				1
9	Maintenance Officer		(1)				
10	TOTAL WARRANT OFFICER		1				1
11	First Sergeant (585)	1c					1
12	Gunnery Sergeant (814)	1c					1
13	Technical Sergeant		2c				2
14	Communication chief (CP) (174)		(1)				
15	Mechanic, motor (QM) (337)		(1)				
16	Platoon Sergeant (651)			1c		1c	4
17	Sergeant		3		1	2	11
18	Maintenance, radio (CP) (174)		(1)c				
19	Mechanic, motor (QM) (014)		(1)				
20	Section leader (machine gunner) (652)				(1)c		
21	Supply and property (821)		(1)				
22	Mess Sergeant (C) (824)		1				1
23	Chief Cook (C) (060)		1				1
24	Corporal	5	1	3	3	9	42
25	Clerk, company (405)	(1)					
26	Mechanic, motor (QM) (014)		(1)	(1)			
27	Operator, radio (CP) (776)	(2)c		(1)c			
28	Operator, reconnaissance car (733)	(2)c		(1)c	(1)c		
29	Reconnaissance(744)				(2)		
30	Assistant Cook (C) (060)		1				1
31	Private (including 1st Class)		14	3	5	13	66
32	Barber (022)		(1)				
33	Cobbler (204) (d)		(1)				
34	Driver, truck (345)		(5)c				
35	Gunner, machine (605)				(2)c		
36	Maintenance, radio (CP) (174)		(1)c				
37	Mechanic's helper (014)		(2)				
38	Operator, radio (CP) (776)			(1)c	(1)c		
39	Operator, reconnaissance car (733)			(1)c	(2)c		
40	Other duty (521)		(4)	(1)			
41	TOTAL ENLISTED	7	23	7	9	25	130
42	TOTAL MARINE CORPS	9	24	8	9	26	137
43	Pharmacist's Mate, 2d Class	2					2
44	TOTAL NAVAL PERSONNEL	2					2
45	AGGREGATE	11	24	8	9	26	139
46	Carbine, .30-caliber, M1	10a	10	6	7	20	100
47	Gun, machine, .30-cal, Browning, M1919A4 (v)				3	6	24
48	Gun, machine, .50-cal, Browning, M2, heavy-barrel, flexible (v)		2				2
49	Rifle, .30-caliber, M1	1	14	2	2	6	39

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Approved: 15 April 1943

SCOUT COMPANY
TANK BATTALION (LIGHT)

Marine Corps
Table of Organization
E-77
(Continued)

Designation: Company "D" (Scout), ___ Tank Battalion

1		2	3	4	5	6	7
		Company Headquarters		Scout Platoon			
50	UNIT	Headquarters Section	Maintenance Section	Platoon Headquarters	Scout Section (3-Car)	TOTAL PLATOON (Hq & 2 Sections)	TOTAL COMPANY (Hq & 4 Platoons)
51	Trailer, 1-ton, 2-wheel, cargo		1				1
52	Truck:						
53	-1/4-ton, 4 x 4				2	4	16
54	-1/4-ton, 4 x 4, radio-equipped (TCS)	2		2	1	4	18
55	-1-ton, 4 x 4, cargo		1				1
56	-2½-ton, 6 x 6, cargo		4				4

a-Includes 2 reserve for medical personnel when required in accordance w/Rules of Land Warfare.
c-Armed w/carbine.
(C)-Commissary branch.
(CP)-Communication personnel.
(d)-Cobblers from various units may be grouped to operate shoe and textile repair unit as required.
(QM)-Quartermaster personnel.
(v)-Vehicular weapon.

NOTE: Serial number in parenthesis refers to specialist qualification as shown in AR 615-26.

Approved: 15 April 1943

HEADQUARTERS AND SERVICE COMPANY
TANK BATTALION (LIGHT)

Marine Corps
Table of Organization
E-79

Designation: Headquarters and Service Company, ___ Tank Battalion

1		2	3	4	5	6
		Battalion Headquarters				
1	UNIT	Headquarters Section	Maintenance Section	Supply Section	Company Headquarters	TOTAL COMPANY
2	Lieutenant Colonel	1c				1
3	Battalion Commander	(1)				
4	Major	1c				1
5	Executive Officer	(1)				
6	Captain	2c				2
7	Bn-3	(1)				
8	Bn-4; Quartermaster	(1)				
9	Lieutenant	4c				4
10	Adjutant; Company Commander	(1)			(1)	
11	Bn-2	(1)				
12	Communication Officer	(1)				
13	Reconnaissance; Liaison	(1)				
14	TOTAL COMMISSIONED	8				8
15	Marine Gunner		2c			2
16	Communication		(1)			
17	Maintenance Officer (General)		(1)			
18	Quartermaster Clerk (QMD)			1c		1
19	TOTAL WARRANT OFFICER		2	1		3
20	Sergeant Major (584)	1c				1
21	First Sergeant (585)				1c	1
22	Master Gunnery Sergeant (OP) (913)		1c			1
23	Master Technical Sergeant		1c			1
24	Motor transport (QM) (337)		(1)			
25	Quartermaster Sergeant			1c		1
26	Gunnery Sergeant (814)	1c				1
27	Technical Sergeant		1c			1
28	Radio electrician (CP) (542)		(1)			
29	Staff Sergeant			1c	1c	2
30	Clerical (QM) (821)			(1)		
31	Mess (C) (824)				(1)	
32	Sergeant	3	5	1	1	10
33	Ammunition technician (OP) (505)		(1)			
34	Armorer (OP) (511)		(1)			
35	Camouflage (EP) (800)	(1)				
36	Clerical (QM) (821)			(1)		
37	Clerk, headquarters (501)	(1)				
38	Mechanic, engine (QM) (909)		(1)			
39	Mechanic, ordnance (OP) (913)		(1)			
40	Reconnaissance (744)	(1)c				
41	Repairman, radio (CP) (174)		(1)c			
42	Supply and property (821)				(1)	
43	Chief Cook (C) (060)	1				1
44	Corporal	5	5	1	2	13
45	Ammunition technician (OP) (505)		(1)			
46	Clerical (QM) (821)			(1)		
47	Clerk, company (405)				(1)	
48	Clerk, postal (056)	(1)				
49	Cobbler (QM) (204) (d)				(1)	
50	Mechanic, engine (QM) (909)		(1)			
51	Mechanic, motor (QM) (014)		(1)			

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RD 376

Designation: Headquarters and Service Company, ___ Tank Battalion

1		2	3	4	5	6
		Battalion Headquarters				
52	UNIT	Headquarters Section	Maintenance Section	Supply Section	Company Headquarters	TOTAL COMPANY
53	Corporal - continued:					
54	Mechanic, artillery (OP) (913)		(1)			
55	Reconnaissance (744)	(2)c				
56	Operator, radio (CP) (776)	(2)c				
57	Stockroom (QM) (821)		(1)			
58	Field Cook (C) (060)				1	1
59	Assistant Cook (C) (060)	1			1	2
60	Private (including 1st Class)	11	8	5	4	28
61	Barber (022)				(1)	
62	Clerk, headquarters (055)	(2)				
63	Driver, truck (345)	(4)c	(6)c	(1)c		
64	Mechanic's helper (014)		(2)			
65	Motorcyclist (378)	(1)c				
66	Reconnaissance (761)	(2)c				
67	Supply (521)			(4)		
68	Other duty (521)	(2)			(3)	
69	TOTAL ENLISTED	23	21	9	11	64
70	TOTAL MARINE CORPS	31	23	10	11	75
71	Commissioned, Medical Corps	1				1
72	TOTAL COMMISSIONED, U.S. NAVY	1				1
73	Chief Pharmacist's Mate	1				1
74	Pharmacist's Mate, 1st Class	1				1
75	Pharmacist's Mate, 2d Class	1				1
76	Pharmacist's Mate, 3d Class	2				2
77	Hospital Apprentice, 1st Class	2				2
78	Hospital Apprentice, 2d Class	2				2
79	TOTAL ENLISTED, U.S. NAVY	9				9
80	TOTAL NAVAL PERSONNEL	10				10
81	AGGREGATE	41	23	10	11	85
82	Carbine, .30-caliber, M1	32a	12	4	2	50
83	Rifle, .30-caliber, M1	9	11	6	9	35
84	Steam cleaning unit, high pressure, portable, trailer-mounted, complete		1			1
85	Motorcycle, w/side car	1				1
86	Trailer:					
87	-1-ton, 2-wheel, greasing		1			1
88	-2-ton, 4-wheel, stockroom		1			1
89	-5-ton, 4-wheel, machine shop, complete		1			1
90	Truck:					
91	-1/4-ton, 4 x 4, radio-equipped (TCS)	2				2
92	-1-ton, 4 x 4, cargo		2			2
93	-1-ton, 4 x 4, reconnaissance	2				2
94	-2½-ton, 6 x 6, cargo		3	1		4
95	-2½-ton, 6 x 6, tank, gasoline, 750-gallon		1			1
96	-2½-ton, 6 x 6, wrecking		1			1

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HEADQUARTERS AND SERVICE COMPANY
TANK BATTALION (LIGHT)

Marine Corps
Table of Organization
E-79
(Continued)

Designation: Headquarters and Service Company, ___ Tank Battalion

	1	2	3	4	5	6
97	UNIT	Battalion Headquarters			Company Headquarters	TOTAL COMPANY
		Headquarters Section	Maintenance Section	Supply Section		

a-Includes 10 reserve for medical personnel when required in accordance w/Rules of Land Warfare.
c-Armed w/carbine.
(C)-Commissary branch.
(CP)-Communication personnel.
(d)-Cobblers from various units may be grouped to operate shoe and textile repair unit as required.
(EP)-Engineer personnel.
(OP)-Ordnance personnel.
(QM)-Quartermaster personnel.

NOTE: Serial number in parenthesis refers to specialist qualification as shown in AR 615-26.

Approved: 15 April 1943

TANK BATTALION (LIGHT)
MARINE DIVISION

Marine Corps
Table of Organization
E-80

Designation: ___ Tank Battalion

1		2	3	4	5
1	UNIT	Headquarters and Service Company (T/O E-79)	Scout Company (T/O E-77)	Three (3) Tank Companies (T/O E-76)	TOTAL BATTALION
2	Lieutenant Colonel	1			1
3	Major	1			1
4	Captain	2	1	3	6
5	Lieutenant	4	5	12	21
6	TOTAL COMMISSIONED	8	6	15	29
7	Marine Gunner	2	1	3	6
8	Quartermaster Clerk (QMD)	1			1
9	TOTAL WARRANT OFFICER	3	1	3	7
10	Sergeant Major	1			1
11	First Sergeant	1	1	3	5
12	Master Gunnery Sergeant	1			1
13	Master Technical Sergeant	1			1
14	Quartermaster Sergeant	1			1
15	Gunnery Sergeant	1	1	6	8
16	Technical Sergeant	1	2	3	6
17	Platoon Sergeant		4	9	13
18	Staff Sergeant	2		6	8
19	Sergeant	10	11	99	120
20	Mess Sergeant		1	3	4
21	Chief Cook	1	1	3	5
22	Corporal	13	42	183	238
23	Field Cook	1		3	4
24	Assistant Cook	2	1	3	6
25	Private (including 1st Class)	28	66	144	238
26	TOTAL ENLISTED	64	130	465	659
27	TOTAL MARINE CORPS	75	137	483	695
28	Commissioned, Medical Corps	1			1
29	TOTAL COMMISSIONED, U.S. NAVY	1			1
30	Chief Pharmacist's Mate	1			1
31	Pharmacist's Mate, 1st Class	1			1
32	Pharmacist's Mate, 2d Class	1	2		3
33	Pharmacist's Mate, 3d Class	2			2
34	Hospital Apprentice, 1st Class	2			2
35	Hospital Apprentice, 2d Class	2			2
36	TOTAL ENLISTED, U.S. NAVY	9	2		11
37	TOTAL NAVAL PERSONNEL	10	2		12
38	AGGREGATE	85	139	483	707
39	Carbine, .30-caliber, M1	50	100	111	261
40	Gun, machine, .30-caliber, Browning, M1919A4		24		24
41	Gun, machine, .50-caliber, Browning, M2, heavy-barrel, flexible		2		2
42	Gun, submachine, .45-caliber			66	66
43	Pistol, .45-caliber			198	198
44	Rifle, .30-caliber, M1	35	39	108	182
45	Tank, Army light, w/armament, radio-equipped (GF/RU)			54	54
46	Tank, Army light, recovery			3	3
47	Steam cleaning unit, high pressure, portable, trailer-mounted, complete	1		3	4

Designation: ___ Tank Battalion

1		2	3	4	5
48	UNIT	Headquarters and Service Company (T/O E-79)	Scout Company (T/O E-77)	Three (3) Tank Companies (T/O E-76)	TOTAL BATTALION
49	Motorcycle, w/side car	1			1
50	Trailer:				
51	-1-ton, 2-wheel, cargo		1	21	22
52	-1-ton, 2-wheel, greasing	1		3	4
53	-1-ton, 2-wheel, stockroom			3	3
54	-1-ton, 2-wheel, water, 300-gallon			3	3
55	-2-ton, 4-wheel, stockroom	1			1
56	-5-ton, 4-wheel, machine shop, complete	1		3	4
57	Truck:				
58	-1/4-ton, 4 x 4		16	6	22
59	-1/4-ton, 4 x 4, radio-equipped (TCS)	2	18	6	26
60	-1-ton, 4 x 4, cargo	2	1		3
61	-1-ton, 4 x 4, reconnaissance	2		3	5
62	-2½-ton, 6 x 6, cargo	4	4	24	32
63	-2½-ton, 6 x 6, tank, gasoline, 750-gallon	1			1
64	-2½-ton, 6 x 6, wrecking	1		3	4